National Stakeholder Workshops

SUMMARY REPORT

August 2002

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strategies to sustainability

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Resource Consultants Ltd.

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE – 2002

-- SUMMARY REPORT --

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Prepared for:

National Climate Change Secretariat

August 2002

EXECUTIVE SUMMARY

Background and Objectives

At the request of federal, provincial and territorial Ministers of Energy and Environment, a series of one-day workshops was held in 14 cities across the country during the period of June 7-24, 2002.

The objectives of the stakeholder workshops were to:

- Provide participants with a common understanding of the potential approaches for responding to climate change and the Kyoto Protocol, and their implications
- Obtain the views of participants on the implications of the analytical studies undertaken by the national Analysis and Modelling Group
- Obtain views of participants on the options contained in the federal *Discussion Paper on Canada's Contribution to Addressing Climate Change*

A total of 619 people participated in the workshops, including 433 stakeholders and 186 federal, provincial and territorial officials. Of the stakeholders, approximately 230 represented business and industry interests and 90 represented environmental interests. The remaining stakeholders included representation from municipalities, the academic community, health organizations labour and others. A total of 13 First Nations or aboriginal organizations participated in a few of the sessions.

The workshop Agenda included a series of presentations (on the National Climate Change process, the national analysis conducted by the Analysis and Modelling Group (AMG), and the Federal Discussion Paper) and opportunities for questions and comment using focus questions. The Agenda was also tailored to meet the interests of various provinces and territories. Presentations on impacts and adaptation as well as the Alberta Action Plan, or other provincial/territorial approaches were provided at the request of individual provincial and territorial governments.

Summary reports were prepared for each of the 14 workshops. In addition, written submissions were received from approximately 75 stakeholders. This report provides an overall summary of the key messages that were expressed. Both of these sets of documents are available on the National Climate Change Secretariat website at:
www.nccp.ca/NCCP/national_stakeholders/index_e.html.

Views on the Analysis

To the extent possible, this summary report as well as session-specific reports have been written to remain faithful to the views as they were expressed by stakeholders. They do not incorporate responses to stakeholder questions by AMG, or other panel members who attended the workshops. This means that the views reported may contain some misinterpretations of the analysis and modelling work, or of the government policy proposals. In addition, there may have been an incomplete understanding of the results due to the lack of time available to fully review the analysis.

Stakeholders noted appreciation for the substantial and useful work the AMG had done, recognizing the large amount of work involved. Stakeholders also recognized the considerable efforts of the AMG to seek out information and incorporate views in order to enhance the credibility of the analysis, including the series of competitiveness consultations with nine energy and/or trade-sensitive industries.

There was concern expressed that economic models cannot adequately describe such issues as competitiveness and capital investment. There was also concern that they cannot account for technology innovation processes at the individual firm level, and that they cannot address impacts at the sector level with enough specificity. While co-benefits and avoided impacts were not included by design in the modelling cases, many stakeholders suggested these needed to be analyzed at a future date. In addition, some participants expressed the view that certain sectoral and firm-level characteristics appear to not have been adequately represented in the national models. A number of industry participants argued that the learnings of the analytical work did not adequately reflect the burden on certain regions and industrial sectors. It was also expressed that the "fiscal rule" assumption in the modelling (which provided for government revenues from the auctioning of emissions permits to be recycled back to the economy through the personal income tax system) has a significant impact on the results, including effects on sectors and provinces/territories, and different rules would have different impacts.

Many participants reiterated the need to take a longer term view, beyond the first commitment period and suggested that a plan be placed in a context that acknowledges the need to go beyond –6% emissions reductions over the longer term.

Suggestions were made for future analysis/modelling. Some participants questioned whether additional macroeconomic modelling work would add to the knowledge of impacts, and suggested that more would be gained by detailed work on final policy and program approaches, especially at the sectoral, provincial/territorial and community levels.

Views on the Overall Approach

There was a very strong consensus from virtually all participants that climate change was a real problem requiring action by all elements of society. However, there were widely divergent views with respect to ratification of the Kyoto Protocol.

Many industry participants argued in favour of an alternative approach that would include longer timeframes, less restrictive targets, and greater harmonization with the U.S. approach. Several expressed interest in the Alberta Plan because it contained some of these characteristics, while others called for a "made in Canada" or North American approach that did not necessarily meet the Kyoto target for the first commitment period. Other stakeholders took issue with the Alberta Action Plan and argued that the Plan must meet the Kyoto target.

In general, stakeholders expressed substantial support for Targeted Measures (TMs) across the country, a mix of some support and specific concerns for Domestic Emissions Trading (DET), and general opposition to international purchases, although with qualified support for the international project mechanisms under the Kyoto Protocol – the Clean Development Mechanisms and Joint Implementation (CDM/JI). There was also little support for Canada's request for Clean Energy Export (CEE) Credits. In addition, there was support from a number of industrial sector participants, most notably in the West and Quebec for negotiated covenants with a regulatory backstop as an alternative to or in some cases a complement to DET. A number of

stakeholders from different interests expressed the need to use policy instruments that recognize the important role of consumers and involve them in reducing or changing energy consumption patterns.

The need for a plan to address a longer timeframe than the first Kyoto commitment period was raised in most sessions, both from the perspective of planning for technological change and preparing for further reduction targets. A number of participants in several sessions expressed a desire for the plan to contain provisions for assistance in a transition period for affected sectors, provinces/territories and communities.

Views on Targeted Measures

A wide range of participants expressed agreement that Targeted Measures (TMs) have considerable potential to achieve reductions and should be a significant part of the plan. A number of participants indicated disagreement with the view expressed in the federal discussion paper that TMs are generally more expensive than market based approaches such as DET (it was noted for example, that many energy efficiency measures can be implemented at little or no cost). A number of participants indicated a need to ensure linkages to the broader government agenda.

There was also support for the use of negotiated covenants with certain industry sectors as part of TMs and strong support for measures to encourage innovation and technology development. There was also an assertion of the need for targeted tax/fiscal measures, for example to accelerate capital stock turnover or to encourage changes in consumer behaviour.

A range of TMs were recommended for specific sectors and in different provinces and territories.

Views on Domestic Emissions Trading

There was fairly broad recognition of the usefulness of market mechanisms to manage emission reductions, but mixed support for different domestic emissions trading approaches. ENGOs were generally supportive of the broad as practical (BaP) concept as outlined in Option 1. Industry participants had serious concerns about the overall targets, the allocation mechanisms, and the potential administrative complexity and costs of a DET system. There was some industry support for a large final emitter (LFE) approach, as outlined in Option 4, but with concern expressed by industry participants over the scale-back factor and the process for determining performance benchmarks. Generally, those who were opposed to ratification often raised concerns with a DET approach.

There was also broad support for the use of offsets and maximizing eligibility for selling other emission reduction credits into a DET system (such as waste diversion and recycling).

Many stakeholders were not familiar with the mechanics of a DET system and felt there was not enough information to make informed decisions.

Views on Purchases of International Permits

There was broad and consistent opposition to international purchases from varied stakeholders across the country. There was a strong preference that investments should be made at home to pursue new technologies, avoid export of capital and capture the environmental co-benefits. There was, however, some support for the use of the Clean Development Mechanism (CDM)/Joint Implementation (JI) international project mechanisms of the Kyoto Protocol.

Views on Cleaner Energy Exports (CEE) Credits

Little support was expressed for Cleaner Energy Exports Credits as outlined in Option 4, mostly because of concerns that it would not necessarily lead to reduced GHG emissions or because of the risk that Canada would not succeed in obtaining such a provision in further international negotiations.

Views on Preferred Approach

Participants were generally unable or unwilling to indicate a preference among the options proposed in the Federal Discussion Paper. The view from industry was that Option 4 had some positive elements and was the "least objectionable" but that, as currently proposed, it did not address competitiveness and other concerns. Many ENGOs supported Option 1, and its design elements of broad coverage and the auctioning of permits, on the basis of its effectiveness from an environmental point of view. Many and varied stakeholders supported an option that relied significantly on targeted measures.

Views on Risks

Participants considered that the main risks of ratification are the competitiveness impacts with the United States outside the Kyoto Protocol, including loss of investment, jobs and a reduced standard of living; as well as the uncertainty about the gap, and the short timeframe for implementation of significant changes in technology and capital stock. Other participants considered the risks of non-ratification to include loss of momentum for effective action on emission reductions, concerns about Canada's reputation in the world, and reduced international competitiveness from lost opportunities to enter overseas markets with new technologies.

Views on Impacts and Adaptation

Although presentations on impacts and adaptation were made in only three workshops, participants at several locations noted the need to incorporate adaptation in a Canadian plan. Several noted the need to improve information on impacts.

Regional Issues and Variations

Although a number of fairly consistent key messages did emerge from the workshops, the individual workshops were quite distinct in terms of the content and tone of the discussion. In addition to variations in level of support for ratification, there were important differences in circumstances (e.g. energy sources, industry base, socio-cultural environment) that were reflected in the discussion.

Next Steps

The results of these workshops will inform the development of the next iteration of a draft implementation plan for meeting Canada's Kyoto commitments, which is to be presented to Energy and Environment Ministers in October 2002. At the same time, the workshop results will also provide context for bilateral and multilateral discussions between the federal government and provincial and territorial governments, during the summer. The draft plan is also expected to provide a basis for a second round of discussions with stakeholders and the Canadian public.

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1. INTRODUCTION

1.1 BACKGROUND

Following the conclusion of the Kyoto Protocol in December 1997, Canada's First Ministers agreed that Canada must do its part to address global climate change. In 1998, federal, provincial and territorial governments established the National Climate Change Process (NCCP), led by the National Air Issues Coordinating Committee on Climate Change (NAICC), co-chaired by senior federal and provincial officials. During the period 1998-2002, NAICC worked with a range of stakeholders to develop analysis and policy options for reducing emissions. At the same time, Canadian negotiators participated in several rounds of discussions on the rules of implementation for the Kyoto Protocol, which culminated in agreements in Bonn and Marrakech in late 2001.

At the May 2002 JMM, Ministers reviewed the *Discussion Paper on Canada's Contribution to Addressing Climate Change*, presented by the federal government and decided that it would serve as the focus for a national series of workshops with informed and engaged stakeholders. Ministers decided that provincial or territorial governments could put forward other papers, such as the Plan developed by Alberta, as additional material for workshops in their respective jurisdictions. Ministers also agreed that following the workshops, a draft implementation plan to address climate change for achieving Canada's Kyoto target would be developed for joint consideration at a future JMM.

The federal government is also planning further stakeholder consultations and broader public consultations in fall 2002 to provide Canadians with the opportunity to express their views on Canada's response to climate change.

1.2 ABOUT THIS REPORT

This Summary Report is based on the 14 reports prepared following each of the workshops (which are further described in subsection 1.5), as well as the approximately 75 written submissions received during and immediately following the workshops. The input has been grouped into key themes or messages.

The report outlines the key messages heard at the workshops and in the written views submitted, as well as highlights of regional issues and variations in the messages observed in the various jurisdictions. Like the workshop reports, the intention of this report is to succinctly and faithfully capture widely expressed views or representative views. It is important to note that, given the intention to provide a summary of the key messages heard from stakeholders, responses which were provided by government participants during the sessions (on questions of fact raised about the analysis or the policy options) are not included in this report. Interpretations should be checked against a series of background documents provided by federal and provincial governments, and listed in Appendix A. (These documents are available from the Workshops Website at *www.nccp.ca/NCCP/national_stakeholders/index_e.html*.)

1.3 OBJECTIVES OF THE WORKSHOPS

The objectives of the stakeholder workshops were to:

- Provide participants with a common understanding of the potential approaches for responding to climate change and the Kyoto Protocol, and their implications
- Obtain the views of participants on the implications of the analytical studies undertaken by the national Analysis and Modelling Group
- Obtain views of participants on the options contained in the federal Discussion Paper.

The workshops were not designed as a forum for negotiating positions, or pursuing consensus on views. Nor was the intention to obtain detailed views on technical aspects of the analysis or the specific design elements of policy options. However, needs and opportunities for more detailed discussion were noted for future follow-up.

1.4 ATTENDANCE AND REPRESENTATION

For the workshops to be successful, the number of participants needed to be manageable and reasonably balanced between stakeholder groups. The first step was to develop a list of the categories of participants that needed to be represented, including civil society and industry representatives. The civil society list included environmental, health, financial, labour, aboriginal, consumer, municipal and academic organizations or representatives, the industry sectors included business/industry associations, and energy, transportation, manufacturing, resource processing, agriculture, and forestry representatives. The provincial and territorial NAICC contacts were the principal source of stakeholder names, as most of them had an existing or recent stakeholder group from which to draw representatives. The list of participants from the consultations held in 2000 was also a source for names, as were the membership lists of the 16 Issues Tables, the existing Integrative Group and the AMG Experts/Contact Group. Federal government departments such as Indian and Northern Affairs, Health, Agriculture and Agri-Food Canada, Environment Canada, Industry Canada and Natural Resources Canada were canvassed for additional stakeholders. Finally, to fill gaps and ensure balance at the invitation stage, an Internet search provided more stakeholder organization names. From these exercises an invitation list totalling approximately 900 stakeholder representatives, and individuals from aboriginal organizations, was compiled.

Following the mail-out of invitations, two subsequent e-mail notices were sent to about 700 invitees (those for whom e-mail addresses were available) to notify them of the availability of background materials on the web site, and to remind them to register. In the period between the mail-out and the actual workshops, approximately 200 additional invitations were issued, via fax or e-mail, as direct requests from stakeholders, or additional names from the provincial, territorial and federal governments were received.

Once registrations began, a guideline of "one organization, one representative" was followed in order to maintain the balance between civil society and industry participants, and to remain within meeting space limits. As it became clear that the response rate to the workshop invitations would likely not exceed 50%, this guideline was relaxed.

A total of 433 stakeholders attended the workshops. Of those, 402 were invited, and 31 were "walk-ins" (i.e., registered on the day of the workshop). In addition, 186 federal, provincial and

territorial government officials attended, for a total of 619 participants. Appendix B provides a summary of stakeholder attendance, including numbers for those who were invited and for those who did attend, a breakdown by stakeholder sector.

1.5 APPROACH

One-day workshops were held in 14 cities across the country during the period of June 7-24, 2002 (see Appendix C). A common agenda was used for all workshops, with some adjustments to provide for the presentation and discussion of other approaches, such as the Alberta Action Plan (in seven jurisdictions) and impacts & adaptation (in four jurisdictions). The workshops were organized, facilitated and reported by consultants from Marbek Resource Consultants and Stratos Inc., under contract to the National Climate Change Secretariat.

The Agenda (see following text box) included a series of presentations to provide background information for the discussion, including overviews of the National Climate Change Process (NCCP); the work and results of the Analysis and Modelling Group (AMG); and the Federal Discussion Paper. At some locations there were also presentations on the Alberta Action Plan and presentations on impacts and adaptation.

GENERIC AGENDA

7:30 – 8:30	Registration and Continental Breakfast
8:30 – 8:45	Welcome and Agenda Review
8:45 – 9:00	NAICC Overview Presentation
9:00 – 9:30	AMG Presentation on Analysis
9:30 – 10:45	Q&A and Focussed Discussion on AMG Presentation
10:45 – 11:00	*Break*
11:00 – 11:30	Presentation of Federal Discussion Paper
11:30 – 12:30	Initial Discussion of Federal Discussion Paper
12:30 – 1:30	*Lunch*
1:30 – 3:45	Dialogue on Federal Discussion Paper (based on focus questions)
3:45 – 4:00	*Break*
4:00 – 4:25	Summing Up What was Heard
4:25 – 4:30	Next Steps/ Closing Remarks

Following the overviews of the NCCP and AMG, participants were given the opportunity to ask questions of clarification and were asked to respond to the first two focus questions related to the analysis (see text box below). Following the presentation of the federal Discussion Paper, and Alberta Action Plan or other provincial/territorial approaches (where applicable), participants were asked to comment on the overall approach.[1] This was followed in the afternoon by a more detailed discussion on instruments and design features using the remaining focus questions. Throughout the day, panel members representing the Secretariat, the AMG, and the federal

[1] The Alberta Action Plan was presented in St. John's, Fredericton, Toronto, Calgary, Vancouver, Yellowknife and Iqaluit.

government participated by answering questions, asking questions and highlighting key considerations. In a number of jurisdictions, Panel members were joined by provincial/territorial officials and/or representatives of the Alberta Government (upon invitation of the applicable jurisdiction). Experts on impacts and adaptation also participated in a few locations.[2] A series of focus questions was used to guide the discussion.

FOCUS QUESTIONS

Focus Questions on the Analysis

1. *Do you have any questions of clarification on the Analytical Work?*
   - Assumptions used
   - Definition of the case studies
2. *What comments do you have on the findings/learnings of the Analytical Work in terms of:*
   - Cost – effectiveness/impact on GDP
   - Competitiveness – overall and by sector
   - Distribution of costs and benefits across the country

Focus Questions on the federal Discussion Paper

1. Recognizing that federal, provincial and territorial ministers of Energy and Environment agreed that the federal Discussion Paper will serve as the main focus of the workshops, the intent is to focus on workable options that would enable Canada to meet its commitments of the Kyoto Protocol.

   What are your views on the overall approach to respond to climate change?

2. Instruments and Design Features

a. *What are your views on possible designs of a Domestic Emissions Trading (DET) system (e.g. with respect to allocation, coverage, offsets)?*
   - Option 1 – Broad as practical
   - Option 2 – No DET
   - Option 3 – Mixed Approach (Large final emitter)
   - Option 4 – Adjusted Mixed Approach

b. *Which Targeted Measures (TM) and/or type of policy instruments are most relevant to your province/territory and sectors?*

c. *For purchase of International Emission Permits, what is the appropriate balance between:*
   - Domestic action and international purchases
   - Government and private purchases

3. Preferred Option or Mix of Policy Instruments

a. *What are your views on the mix of policy instruments to be use in designing a workable plan to meet Canada's Kyoto target? Why? (e.g. competitiveness, distribution of costs and burden, co-benefits, contribution to Kyoto commitments, etc.)*

b. *What are the risks involved in meeting Canada's Kyoto target and how should they be managed? What are the risks of not ratifying the Protocol?*

Participants were encouraged to be open in sharing their views, on the understanding that there would be no attribution in the report. Participants were also asked to respect the "no attribution" rule in their public discussions of the workshops (e.g. with the media). To facilitate this, and to encourage open and frank discussion, media were excluded from the sessions.

[2] Impacts and adaptation issues were presented and discussed in Iqaluit, Whitehorse , Montreal and St. John's.

Given the time limitations, participants were also encouraged to be brief (3-5 minutes) and to avoid formal presentations. For those who wished to provide written views, an alternative route was provided (website and fax), which was available until June 27, 2002. A summary of the written views received is provided in Appendix D and these views have also been reflected in this report.

The individual workshop reports consist of 4-5 page accounts of what was heard at each workshop. The reports do not provide a verbatim transcript (although the workshops were taped to allow rapporteurs to verify their notes) nor do they include a record of all views expressed. The workshop reports represent an attempt to capture views that in the judgment of the rapporteur and the facilitator were either widely held or were representative of the views of a sub-section of participants. To the extent possible, the reports have attempted to remain faithful to the views as they were expressed, and do not include either editorial influence or the replies of the panel members who attended the workshops. This means that the views reported may contain inaccuracies and/or misinterpretations of the analysis and modelling work, or government policy proposals. As noted, interpretations can be checked by examining background documents provided by federal and provincial governments, listed in Appendix A.

The individual workshop reports and lists of participating organizations are reproduced in Appendix E.

2. KEY MESSAGES

2.1 ANALYSIS AND MODELLING[3]

Views on the analysis can be grouped into three general categories:

- Concerns with modelling inputs and assumptions
- Perspectives on results
- Suggestions for future analysis/modelling

To the extent possible, this summary report as well as session-specific reports have been written to remain faithful to the views as they were expressed by stakeholders. They do not incorporate responses to stakeholder questions by AMG, or other panel members who attended the workshops. This means that the views reported may contain some misinterpretations of the analysis and modelling work, or of the government policy proposals. In addition, there may have been an incomplete understanding of the results due to the lack of time available to fully review the analysis. More specific information on the AMG assumptions, methods and results can be found in the background documents listed in Appendix A.

Given that the following summary reflects discussion on concerns with the AMG work, it is important to note that participants in a number of the workshops expressed their appreciation of the hard work of the AMG and congratulated the Group on making substantial progress in characterizing the economic implications of climate change mitigation strategies. Stakeholders recognized the considerable efforts of the AMG to seek out information and incorporate views in order to enhance the credibility of the analysis, including the series of competitiveness consultations with nine energy and/or trade-sensitive industries.

2.1.1 Concerns with Modelling Inputs and Assumptions

- ***Modelling Work Underestimates Impacts on Competitiveness.*** Industry participants at most workshops and in written submissions, expressed the view that the analysis did not adequately reflect adverse impacts on the competitiveness of various industries, notably energy producers, and large consumers (some participants quoted competing studies). More specifically, participants raised issues regarding:

    - The extent to which the integrated nature of the North American economy was addressed in the modeling
    - The long lead-times needed for transition in the face of sunk capital and the degree to which the models accounted for this
    - The vulnerability of Canadian industry to competition from countries not subject to a Kyoto ratification target (e.g. U.S. and non-Annex 1 countries)
    - Reduced access and increased cost of capital, particularly foreign direct investment, resulting from investor perceptions of added costs or risks (and the associated potential for reduced credit ratings for Canadian firms)
    - The nature of business investment decision-making in different sectors

[3] A summary of the AMG results, findings of AMG competitiveness studies, as well as background studies and studies of the main drivers of provincial/territorial economies can be found on the National Stakeholder Workshops 2002 website at http://www.nccp.ca/NCCP/national_stakeholders/amg_e.html.

- ***Macro-Economic Analysis Inadequately Addresses Sector Impacts.*** Several industry participants indicated that there were important regional and sectoral characteristics (e.g. different decision factors, different growth phases) that were not adequately represented in the national models. There were a number of questions about the assumptions used related to certain sectors, and requests for additional discussions on sector-specific modelling issues.

- ***Effects of Fiscal Rule Assumption***. While recognizing the need for a fiscal rule assumption, some industry participants indicated concerns with the fiscal rule assumption including: concerns about whether the funds would be fully recycled by the government, and questions about whether Canadian consumers would spend their increased disposable income in Canada. Concern was also raised that recycling revenues through the personal income tax system would not have the same impact as returning money to industry for investment in new technology.

- ***Price of International Permits.*** Several participants noted concerns over the range of $10 to $50 per tonne of carbon dioxide. Some participants indicated that $10 was too high, and that modelling for $50 per tonne was unrealistic, while others suggested that the price of carbon could rise beyond $50 per tonne post 2012.

- ***Modelling Work Does Not Reflect Benefits and Co-Benefits.*** Many participants (usually ENGOs) noted that the economic analysis does not reflect the potentially significant environmental and health benefits associated with cleaner air. Some also noted that the avoided costs associated with mitigating climate change are not reflected (though it was recognized in some cases that Canadian action in itself would have little overall effect on climate change.)

- ***Results Underestimate Potential for Innovation.*** Many participants (usually ENGOs but also representatives of the efficiency and alternative energy industries) questioned whether or not the models adequately reflected the availability of new technologies that would emerge in response to the economic incentives. In particular, it was noted that major advances, as opposed to incremental change, were unlikely to have been modelled. It was suggested that this resulted in an overstatement of costs and impacts on competitiveness.

- ***Longer-term Perspective***. Participants in many of the sessions raised the need for the national plan to take a longer-term perspective beyond the first commitment period of the Kyoto Protocol. Views ranged from the importance to plan for technological change (which takes time) to the need to plan for emissions reductions beyond the current 6% emissions reduction target for Canada.

2.1.2 Perspectives on Results

- ***Uncertainty And Confidence Levels Are Not Clear.*** Some participants questioned the range of uncertainty associated with the results and suggested that more information be provided on the level of confidence in the results.

- ***Results Underestimate Impacts on Industry.*** Some industry participants indicated that the large price increases anticipated in option 1 and to a lesser extent in option 3 would lead to more plant shutdowns and a greater impact on new investment than reflected in the models. In addition some participants were sceptical that reduced personal income tax would be enough to counteract these and other effects on industry (in Option 1).

- ***Results Overestimate Impacts of Higher Energy Prices on Consumers.*** A substantial number of participants observed that the actual consumer response to higher prices is likely to be much less than the modelling results would seem to imply. Given this, there was some scepticism about whether the assumed level of emission reductions was realistic.

- ***Analysis Indicates Unacceptable Burden.*** Many industry participants concluded that the analysis indicates a large cost to the Canadian economy and an unacceptable burden for certain regions and industrial sectors of the economy.

- ***Analysis Indicates Minimal Costs.*** Many ENGO participants concluded that the costs are relatively minor and that the distribution of burden is unavoidable to ensure the reduction of emissions.

2.1.3 Suggestions for Future Analysis/Modelling

Many of the following suggestions for future analysis flow from the concerns expressed about modelling inputs and assumptions. It also should be noted that a number of participants suggested that there are minimal benefits to be gained from additional macroeconomic modelling work and that more would be gained by detailed work on final policy and program approaches, especially at the sectoral level.

- ***Success in Negotiating Credit for Clean Energy Exports (CEE).*** Both industry and ENGOs were sceptical that Canada would succeed in obtaining credit for CEE. It was suggested that, at a minimum, any future analysis consider scenarios with and without CEE.

- ***Size of the Gap.*** Many participants noted that the size of the Kyoto gap had changed several times over the past few years and that it was likely to change again as growth and other factors influence emissions. Given the effect of the gap on the economic costs, it was suggested that any future analysis include a sensitivity analysis of a reasonable range in the gap.

- ***Need to Model Targeted Measures.*** Many participants noted that it would have been helpful to have modelling results for Option 2. Although most appreciated that there may be limitations in how much of the Canadian Kyoto target TMs could achieve, there was a strong view that an option that relied more extensively on TMs should be modelled.

- ***Need to Consider Broader Indicators.*** Many ENGOs noted the narrow nature of GDP as a measure of societal progress and suggested that the modelling look at broader measures such as the Genuine Progress Indicator (GPI).

- ***Need to Consider Benefits and Co-Benefits.*** It was suggested that future analysis should consider the economic co-benefits of technology investments and new opportunities, and the environmental and health co-benefits of cleaner air.

- ***Need for Improved Information on Costs of Climate Change.*** Several participants suggested a need to focus not only on quantifying the potential costs of mitigation, but also the potential costs of climate change itself.

- ***Need to Re-Examine Period Post-2012.*** A large number of participants (both ENGO and industry) noted the long-term nature of the challenge; and the reality that the first commitment period reductions are only a first step. It was suggested that the modelling needs to address the probability of a higher emissions reduction target for the second commitment period.

- ***Need for More Specific Sector Analysis*** A substantial number of participants from a range of industrial sectors and regions raised the need for more detailed analysis of sector impacts in specific provinces and territories, including drawing on the assumptions and analysis which have been prepared by the sectors and companies themselves

2.2 OVERALL APPROACH

There was a very strong consensus from virtually all participants that climate change was a real problem requiring action by all elements of society. Although there were strong disagreements on Canadian ratification of the Kyoto Protocol (see below), few participants questioned the science or the impacts. Views on the overall approach can be grouped into four categories:

- Views on the policy objectives
- Views on ratification of Kyoto
- Views on non-Kyoto alternatives
- Views on key elements of the approach.

2.2.1 Views on the Policy Objectives

- ***General Agreement on Policy Objectives.*** Although there were many questions, most participants agreed that that the key policy objectives outlined in the Discussion Paper (p.22) were reasonable. Although many industry participants, disagreed with the goal of achieving the Kyoto target, there was general agreement on the objective of reducing emissions.

- ***Conflicting Objectives.*** It was noted that there was significant tension between the objective that no region be asked to bear an "unreasonable burden" and the objective that "the polluter pays". Some participants suggested that the principle of regional equity seems to be driving a preference for an option that the modelling suggests will impose higher burdens on everyone.

- ***Support for Additional Objective of Establishing Base for Long Term Efforts.*** There was also a strong consensus that the problem and the solution were long-term in nature and would require increasing efforts over the coming century in both mitigation and adaptation. This was further elaborated in terms of a desire to lay a foundation for long-term progress, recognizing that appropriate actions in subsequent commitment periods (i.e. post 2012) could be facilitated or hindered by current proposed policies.

- ***Suggestion for Comparative Evaluation.*** It was suggested by a few participants that the debate could be facilitated by publishing a more explicit evaluation of the options against the objectives. This would make the trade-offs clearer and the weightings of policy objectives more transparent. It could also facilitate comparisons with the approaches of other countries.

2.2.2 Views on Ratification of Kyoto Protocol

The purpose of the consultation was not to seek views on whether Canada should ratify the Kyoto Protocol. However, many participants took the opportunity to express views on ratification, and their views on other issues were also often expressed in the context of positions on ratification. As described below, stakeholders were divided on this issue. It should be noted, however, that numerous participants on both sides of the issue expressed frustration with the atmosphere of uncertainty and the associated costs created by the ongoing lack of a decision.

- ***Canada Should Not Ratify the Kyoto Protocol.*** Industry participants were generally opposed to ratification. A wide range of industry stakeholders expressed the view the Kyoto Protocol is badly flawed because it imposes absolute targets on only a small number of countries. For Canada, this would mean higher costs and a shift of investment to other countries not bound by targets. The result would be that Canada would lose investment while global emissions would rise (as market share shifts to less efficient industries in developing countries). With the U.S. not ratifying, the situation will be even worse because of the integrated nature of the North American market and the ease with which companies can relocate capacity to the U.S. or Mexico. Some industry participants also expressed the view that Canadian industry in general has already made significant strides in energy efficiency and emission reduction, and that the focus should be on other sectors of the Canadian economy where emissions continue to rise.

- ***Canada Should Ratify the Kyoto Protocol.*** ENGOs and some other participants (e.g., municipalities, representatives of renewable energy industries and some aboriginal organizations) strongly supported ratification. Views in favour of ratification stressed the importance of international action in light of the global nature of the problem. There was significant concern that, in the absence of ratification, there would be little incentive for action. There was also concern that if it does not ratify, Canada would lose an opportunity to develop a future-oriented innovation-based economy. Although many acknowledged that the Kyoto Protocol has some flaws, it was suggested that it was a necessary first step to establish a framework for future progress. Participants favouring ratification also noted that Canada had received many concessions in the international negotiations (e.g. on emissions trading rules and on sinks) and were it not to ratify, would appear to be reneging on those agreements. A view was also expressed that Canada's failure to ratify would result in the loss of bargaining power in future negotiations.

2.2.3 Views on Non-Kyoto Alternatives

- ***Need for an Alternative.*** Having voiced their opposition to Kyoto, many industry participants identified the need for a different approach. Although specific recommendations differed, most identified the following characteristics as being desirable:

  - ***Longer Timeline.*** Many industry participants feel that the Kyoto deadline is too constraining. Given the long lead times for capital stock turnover, many advocated timelines of 15 years or more. Others stated that the Kyoto timeframe is needed to create the necessary incentives.

  - ***Less Restrictive Targets.*** Numerous industry participants argued that the targets should be based on what can be achieved using best practices as opposed to being set artificially. Many stated the proposed targets cannot be physically achieved, and will only result in

the need for additional international purchases. A large proportion also supported the idea of emission intensity targets as opposed to an absolute cap on actual emissions. On the other hand, a number of participants argued that the Kyoto target is modest in the context of what is required and what can be achieved.

- ***Better Harmonization with the U.S.*** Numerous industry participants noted the importance of the U.S. and the increasing harmonization of North American markets. They advocated seeking a North American approach, so that Canada can protect its competitiveness and position itself to take advantage of opportunities created by U.S. policies. On the other hand, some participants stated that global and multilateral approaches are just as important.

- ***Mixed Views on Alberta Action Plan.*** In some of the jurisdictions in which it was presented, a number of participants (mainly industry) indicated that the Alberta Action Plan was a step in the right direction. In general, industry expressed interest in the characteristics noted above as well as the expanded use of negotiated covenants. On the other hand, ENGOs strongly criticized the plan, primarily because it allows absolute emissions to rise. Several participants pointed out that despite their differences, there were many important commonalities between the federal options and the Alberta Action Plan and many ideas, such as technology development, that could be shared.

2.2.4 Views on Key Elements of the Approach

- ***Different Levels of Support for Different Instruments.*** There was extensive discussion of Targeted Measures (TMs) across the country, with stakeholders widely supporting their use as an important element of a plan. Views of stakeholders on Domestic Emissions Trading (DET) were more varied, with many specific concerns, and support in some cases. There was general opposition to international purchases, although there was qualified support for the Kyoto Mechanisms for CDM/JI projects. There was also interest expressed in a negotiated covenants approach in certain industrial sectors.

- ***Little Support for Clean Energy Exports (CEE) Credits.*** ENGOs argued that CEE credits would weaken the integrity of the Kyoto Protocol by allowing a further increase in emissions. While industry might support CEE credits in principle, the prevailing view seemed to be that Canada will not be successful in negotiations and, that they should therefore not be counted on. Industry raised concerns that they will face liability for the 70 Mt if negotiations fail. Some also raised concerns that the credits will not be sufficient to outweigh the fundamental problems with the Kyoto Protocol.

- ***Impact of Current Programs and Sinks.*** Some participants noted that it was unlikely that the anticipated 74 Mt of emission reductions assumed for current actions and credits in the discussion paper could be achieved.

- ***Increase Emphasis on the Role of Individuals, Households.*** Many participants (both industry and others) noted the importance of individual consumer decisions as both direct and indirect drivers for emissions and emission reduction. It was suggested that the approach should include a strong information and awareness component in order to build support and influence behaviour.

- ***Include Adaptation.*** There was general consensus that adaptation measures would be necessary under any scenario. Many participants argued that it was important that adaptation measures be included in plan in order to establish the basis for a long-term adaptation strategy.

- ***Alternatives to the Fiscal Rule Assumptions.*** There were many and varied suggestions on how best to recycle revenues as well as some suggestions on alternative ways to fund expenditures. A number of participants (both industry and a few ENGOs) suggested that recycling could be used to support the transition of most affected industries. Others suggested the funds could be used to support TMs, R&D and renewable energy. Still others suggested that the revenues could be recycled through reduced consumption taxes (i.e. GST) or corporate taxes.

- ***Need for Federal Leadership.*** A variety of participants noted that the success of any plan would depend on the willingness of governments in general, and specifically the federal government, to demonstrate leadership. These participants and others indicated that leadership would probably entail, among other things, a variety of tax measures and significant new spending to invest in new technologies, particularly to support a range of Targeted Measures.

2.3 TARGETED MEASURES

There was substantial support across a wide range of participants for the view that Targeted Measures (TMs) have considerable potential and should be a significant part of the plan. Many indicated disagreement with the view expressed in the federal discussion paper that TMs are generally more expensive than market based approaches such as DET (it was noted for example, that many energy efficiency measures can be implemented at little or no cost).

The views expressed on TMs can be grouped into three categories:

- Views on appropriate types of TMs
- Views on important characteristics for TMs
- Identification of potential TMs within defined sectors.

2.3.1 Views on Appropriate Types of TMs

- ***Interest in Negotiated Covenants.*** Several industry participants from different industrial sectors (including oil and gas, and electricity) indicated an interest in negotiating covenants with governments and some promoted this approach as an alternative to DET. The idea would be to allocate specific reduction targets to specified industries, provide a regulatory backstop if necessary, and let industry determine the best way to achieve the reductions. The approach to reducing flaring taken through Alberta's CASA process was cited as an example.

- ***Support for Tax Improvements to Accelerate Capital Stock Turnover.*** Many participants supported tax improvements as an incentive for industry to accelerate capital stock turnover (e.g. Accelerated Capital Cost Allowance), and to influence consumer behaviour (e.g. transit pass tax exemption)..

- ***Linking Current Programs to Climate Change Goals.*** A few participants noted that many existing programs (e.g. infrastructure funds, government procurement) could be linked more directly to the achievement of climate change goals. It was also noted that some existing federal and provincial regulations, policies and programs could create barriers to investment in projects that could yield emission reductions.

- ***Support for Promoting the use of Renewable Energy.*** Many participants supported the use of targeted government investments in renewable energy technologies.

- ***Support for more Transportation TMs.*** Many participants supported measures to reduce transportation emissions, including urban transit, intermodal freight transport, and climate-friendly infrastructure spending

- ***Support for Specific TMs to Address Aboriginal Issues and Interests.*** Aboriginal representatives and others noted the needs and opportunities for measures to be taken in cooperation with first nations.

- ***Support for Education and Outreach to Engage Consumers.*** In keeping with the perceived importance of the engagement of consumers, there was broad support for TMs that would increase the understanding, commitment and participation at this level of society.

2.3.2 Views on Important Characteristics for TMs

- ***TMs should be Performance Based.*** There was a broad view that governments should establish targets but avoid specifying methods or technologies.

- ***Need for Government Coordination.*** A few participants noted that it would be important, particularly in the context of TMs, for federal and provincial governments to work together to ensure measures are reinforcing rather than duplicative or counter-productive.

- ***Need for Continuity.*** Many participants noted that governments should build on past and current successes by expanding and extending current programs where appropriate; by designing new programs to be consistent with existing ones; and by encouraging/supporting existing partnerships to take on emission reduction initiatives.

- ***Need to Minimize Administration Costs.*** A few participants reminded governments to avoid creating programs that increase bureaucracy and demand excessive transaction costs (either by government or by the private sector).

- ***Need to Link TMs to Other Policy Objectives.*** Several participants emphasized that many TMs could contribute to the achievement of other government policy agenda, such as clean air and innovation. Governments were encouraged to develop a clear framework for evaluating TMs against broad societal goals.

- ***Draw from List of Measures Recommended by Tables.*** Several participants questioned whether the work that had been done by the Issue Tables is sufficiently well reflected in the review of options outlined in the Discussion Paper.

2.3.3 Identification of Potential TMs Within Defined Sectors

Electricity

- Capital Cost Allowance (class changes and flow through) for renewable energy investments
- Improve access and expand transmission infrastructure for inter-provincial energy exchange
- Financial incentives to lower the cost of green power
- National renewable portfolio standards
- Emission performance standards
- Support for R&D on CO_2 capture and storage
- Support for cogeneration opportunities in the North
- Financial support for renewable energy projects
- Examine potential role for nuclear energy
- Regulatory incentives for utility Demand Side Management (DSM) initiatives (net metering, conservation programmes, inverted rate structure, etc.)
- Incentives to phase out coal plants and convert to natural gas
- Regulatory reform to support faster development of hydro projects.

Oil & Gas

- Investments in sequestration technology
- Regulatory incentives for gas distribution utility DSM
- Measures to support increased access to natural gas.

Buildings

- Funding of pilot projects
- Performance-based incentives for building energy retrofits
- Social marketing on energy efficiency (residential and commercial)
- Tax incentives for choosing energy efficient housing
- Specific building codes for the North
- Regional energy centre for the North to coordinate activities and resources
- Mandatory labelling system
- Remove tax disincentives for use of renewable energy and energy conservation products vs. fuels
- Support for end-use fuel switching
- Energy efficiency programs (e.g. Power Smart)
- Improved energy standards for commercial buildings.

Industry

- Mandatory reporting of performance information
- Measurement and audit programs
- Incentives to support energy audits
- Accelerated CCA and/or other tax reductions to encourage quicker turnover of capital stock
- Negotiated covenants (e.g. similar to accords between Québec and Aluminium industry)
- Establishment of an investment fund to overcome expectations of short term payback
- Support for metering
- Enhancement of CIPEC, OEE and VCR programs.

Transportation

- Tax deductibility of transit and rail travel expenses, and tax exemption for transit passes
- Support for public transit
- Expansion of ethanol programs (note: there was also substantial opposition to these programs)
- Tax incentives for low emission vehicles, increased taxes on "gas guzzlers", feebates
- Programs to control emissions from small engines (e.g., discourage use of two-stroke engines)
- Funds to support modal shift from truck to rail
- Municipal bylaws to create disincentives for parking
- Gasoline taxes
- Road pricing
- Incentives for marine transport in the North
- Incentives for energy efficient off-road vehicles in the North
- Fuel economy standards
- Urban Transportation Demand Management (TDM) measures (high occupancy lanes, parking restrictions, cycle paths)
- Reorientation of existing infrastructure programs to support GHG reductions
- Long-term measures to support sustainable transportation planning
- Support for new vehicle technology
- Payload exemption for anti-idling technology
- Distance-based insurance
- Parking pricing measures
- Programs to encourage telecommuting
- Funding support for enhanced linkages between urban and rural public transport
- Urban fuel tax
- Vehicle tax
- Driver education.

Municipalities

- Urban planning support (also rural land use planning)
- Support for community energy systems in the North
- Support for community energy planning
- Programs for enhanced landfill gas recovery.

Agriculture and Forestry

- Measures to support improved management of woodlots, riparian zones, shelterbelts, hedgerows and buffer zones
- Nutrient management education and planning support, including support for management plans for individual large farms
- Soil conservation measures
- Incentives for bio-fuels and hedgerow planting
- Incentives for agriculture practices to support reduced emissions and enhanced sinks
- Support for research on cattle to reduce emissions and deal with manure.

Technology

- Grants and loans for pilot testing (with payment dependent on successful installation)
- Incentives for potential customers.

2.4 DOMESTIC EMISSIONS TRADING

Many and varied stakeholders noted that the Domestic Emissions Trading (DET) concept is very new to most people, and the mechanisms and implications are complex. Many felt that they lacked sufficient information and understanding of the issues and trade-offs to comment effectively.

The views expressed on DET can be grouped into three categories:

- Views on the DET concept and the options
- Views on allocation mechanisms
- Views on other aspects and considerations.

2.4.1 Views on the DET Concept and the Options

- ***Some Support for DET Concept.*** There was fairly broad recognition of the usefulness of market mechanisms to manage emission reductions, but mixed support for different domestic emissions trading approaches. ENGOs were generally supportive of the broad as practical (BaP) concept as outlined in Option 1. Industry participants had serious concerns about the overall targets, the allocation mechanisms, and the potential administrative complexity and costs of a DET system. There was some industry support for a large final emitter (LFE) approach as outlined in Option 4, but with concern expressed by industry participants over the scale-back factor and the approach for establishing performance benchmarks. A substantial number of participants were reluctant to comment on the design features of DET options because they felt "the devil is in the detail".

- ***Covenants as an Alternative Approach.*** As noted earlier, there was interest from a number of industry sectors for negotiated covenants as an alternative approach closely related to DET.

- ***Industry Concerns About Targets.*** Many industry participants observed that starting with the Kyoto target meant that the number of permits would be insufficient and therefore companies would be forced to purchase expensive permits on the international market or shift production to other countries. Either way there would be a transfer of wealth outside of Canada.

- ***Some Support for Large Final Emitter (LFE) Approach.*** Although many industry participants were opposed to DET based on the Kyoto target, those supporting DET preferred the LFE approach as opposed to the BaP approach. Some other stakeholders (but not most ENGOs) also preferred the LFE approach. For supporters of LFE, the lack of coverage was more than offset by the greater practicality of the system, the smaller size of the fiscal transfers, and the more modest impact on energy prices. Support for the LFE approach was generally closely linked to support for gratis allocation rather than auctioning.

- ***Some Support for Broad as Practical (BaP) Approach.*** A smaller number of participants (but most ENGOs) supported the BaP approach, in order to obtain maximum coverage and best economic efficiency with a lower administrative burden.

- ***Industry Concerns About Administrative Complexity.*** Many industry participants noted that the system was untried and even the examples cited (e.g., SO2 trading in the U.S.) were of limited applicability. Significant concerns were expressed about the complexity of the

allocation process, the registration of trades, and the monitoring and enforcement process. In particular there was a concern about the impact on smaller companies that would be covered in an LFE scenario, but have not been heavily involved in DET discussions. There is also concern about indirect impacts on Small and Medium Enterprises (SMEs) in general.

2.4.2 Views on Allocation Mechanisms

- ***Qualified Support for Gratis Allocation Using Option 4 Formula.*** Most industry participants supported gratis allocation and appreciated the efforts made to accommodate emissions intensity, available technology, and growth, Though few indicated that this approach was acceptable as is, it was characterized as the "least objectionable". Two concerns predominated: the first was that the process for categorizing industry operations and determining benchmarks of "BAT at reasonable cost" would be excessively complex and subjective, leading to a lot of lobbying; the second related to the application of a scale-back factor, which, in the view of numerous industry participants was essentially a tax to be paid by even the most advanced companies.

- ***Some Support for Auction.*** Most ENGOs and some other participants supported the use of auctions as the fairest way of allocating permits. In the view of these participants, auctions are more consistent with the "polluter pays" principle and avoid most of the administrative complexity involved in the allocation of gratis permits. In addition, auctions provide funds, which could potentially be recycled in a variety of advantageous ways. While the prevailing ENGO sentiment was that gratis allocation should be very limited, there was also a suggestion that a compromise might be to allocate most permits gratis but auction the last 10-20%.

2.4.3 Views on Other Aspects and Considerations

- ***Broad Support for the Expanded Use of Offsets.*** Many and varied participants supported the idea, included in Option 4, to allow the creation of tradeable credits for activities that reduce or sequester emissions, and in particular agricultural and forestry sinks. It was noted however, that technical issues remain to be resolved relating to the certainty and duration of associated reductions. The question of who owns the credits was also raised by several participants. Many participants supported the expansion of the offset concept to include credits created by emission reductions in other sectors not covered by DET (e.g., energy efficiency improvements in buildings or in small industries, and for activities such as recycling). This was often accompanied by a caution to ensure that the emission reductions be verifiable.

- ***Concern About Treatment of Emission Reductions Already Implemented.*** Some participants in a few different workshops expressed concern about the treatment of reductions undertaken since 1990. In covered sectors, the concern was primarily about baseline protection whereas in other cases, there was a view that some form of credit for early action needed to be provided.

- ***Concerns Related to Sinks.*** The potential role of carbon sequestration in agricultural soils and forests (carbon sinks) was discussed in detail in some jurisdictions, both in the context of targeted measures and DET. A clear distinction was drawn between activities which create sinks and the ongoing activities related to maintain them. The importance of providing incentives to maintain sinks, not just create them, was emphasized. Participants in several

jurisdictions also emphasized the importance of having sinks credits accrue to those holding tenure over agriculture or forest lands (e.g farmers, aboriginal groups).

2.5 PURCHASES OF INTERNATIONAL EMISSIONS PERMITS

The main views on purchases of international emission permits were as follows:

- ***Broad Opposition to Purchases of International Emission Permits.*** There was broad and consistent opposition to international purchases from varied stakeholders across the country. Most ENGOs expressed a desire to see real emission reductions in Canada and to take advantage of the environmental co-benefits. Most industry participants and others expressed opposition to the associated transfer of capital out of Canada. They expressed a strong preference for investments to be made at home rather than for the purchase of international permits. They supported investment in new technologies in Canada

- ***Little Interest in "Greening" of Surplus Permits.*** There was widespread opposition to and concerns raised about the advisability and feasibility of government purchase of so-called "hot air" (GHG reduction permits which are expected to be available because of the contracting economies of Russia and the Ukraine). Further, some were sceptical of the potential to ensure adequate "greening", or felt that "greening" would not outweigh basic objections to these permits. Others questioned whether greening might drive up the cost of these permits to the point where their purchase was no longer attractive from an economic perspective

- ***Some Support for Use of the Clean Development Mechanism /Joint Implementation (CDM/JI).*** Although this mechanism did not appear to be well understood by many participants, some support for its use emerged following explanations by the Panel. In general, this support was based primarily on an interest in promoting development goals, which some indicated should be considered separately from GHG reduction goals; or for specific investment opportunities for Canadian companies where projects are financially feasible in their own right.

2.6 PREFERRED APPROACH

In most workshops, very little time was spent on this topic. In many cases, participants felt that the topic had been adequately covered under the "Overall Approach" heading. In other cases, there was insufficient time to discuss it in detail. Nevertheless, the key messages were as follows:

- ***Many Industry Participants were Unable and/or Unwilling to Indicate a Preference.*** Many industry participants indicated that they were unwilling to indicate a preference among Kyoto options, which they all viewed as unacceptable. Others indicated that there were still too many gaps in the analysis to allow them to choose.

- ***Some ENGOs Support Option 1.*** A few participants (mainly ENGOs) at several workshops were willing to state a preference for option 1. In their view, option 1 is preferred because it is the most efficient and respects the "polluter pays" principle.

- ***Some Others Support Option 2.*** A range of different participants (including some industry and ENGOs) supported an option based mainly on TMs. For the ENGO stakeholders, the advantages of co-benefits (environmental and economic) were the principal driver.

- ***Slightly More Support for Option 4.*** A variety of participants (mainly industry) expressed interest in Option 4. Although few industry participants supported the option directly, they acknowledged the advantages of the allocation formula and indicated that the option was the least objectionable. Others stated that the proposed mix of TMs and DET, with offsets provided a good balance.

- ***Little Discussion of Option 3.*** There was little explicit discussion of Option 3, which was generally seen as differing from Option 4 only in the use of CEE credits. A few participants indicated support for this option because it did not include a reliance on CEE credits.

- ***Interest in Transition Planning.*** A number of participants in several sessions expressed a desire for the preferred approach to contain provisions to provide assistance in a transition period, including: (1) assistance to affected sectors (at national, provincial, and possibly plant level); (2) assistance to affected communities (for job losses, and increased energy costs); (3) assistance to affected individuals (the poor, or those living in rural areas); and (4) assistance to aboriginal communities (to engage individuals, to develop and implement mitigation measures and for adaptation).

2.7 RISKS

Comments on risks were directed either towards the risks of ratification or the risks of non-ratification.

RISKS OF RATIFICATION

- ***Concern about Loss of Competitiveness.*** Most industry stakeholders (and some others) considered this to be the main risk. The fear is that the additional costs will lead to the loss of investment and jobs in Canada. As noted previously, the concern has grown with the U.S. decision not to ratify the Kyoto Protocol. Numerous participants noted that Canada would be the only country in the Americas with an emission reduction target under the Kyoto Protocol.

- ***Concern about Timeframe Too Short*** Industry participants raised concerns that the time needed for uptake of new technologies, and for the turnover of capital stock, well exceeds the first commitment period (2012) under the Kyoto Protocol. This creates a substantial risk of not achieving the target, which could create a substantial and costly liability for affected companies and sectors, and/or for the federal government.

- ***Uncertainty about Gap and Ability of TM to Meet Target***. The gap between 1990 emission levels and actual or projected GHG emissions has been growing and there is a risk that the current estimate of 240 Mt will increase, due to industrial and energy-use growth. There was also a concern expressed about the rate of uptake of targeted measures required to meet reduction targets, and about the low probability of Canada obtaining credit for Cleaner Energy Exports as an significant part of filling the gap.

RISKS OF NON-RATIFICATION

- ***Concern about Maintaining Momentum for Emission Reductions.*** Most ENGO stakeholders (and some others) consider this to be the main risk. The fear is that without the challenge of meeting Kyoto targets, there will be insufficient incentives to make the necessary changes in the short term that will be necessary for long term reductions. At the same time, the environmental and economic co-benefits could be lost and Canada could fall behind in terms of energy technologies.

- ***Concern about Vulnerability of Kyoto Protocol.*** Some stakeholders expressed the fear that without Canada's participation, the entire Kyoto process would be more vulnerable. Although Canada represents a small percentage of emissions, it has a critical position as the only country in the Americas that would be bound by a target under Kyoto.

- ***Concern about Canada's Reputation.*** Many stakeholders (mainly ENGOs) consider this to be a significant risk. In the view of these participants, Canada extracted concessions from other countries on the implicit understanding that this would ensure Canada's ratification. Were Canada not to ratify, this could be perceived as reneging on an agreement and could have repercussions in other areas of foreign affairs.

2.8 IMPACTS AND ADAPTATION

Although presentations on impacts and adaptation were made in only three workshops, comments on this subject were made at most locations. The principal views were:

- ***Need to Include Adaptation in Plan.*** As noted previously, many participants argued that it was important that adaptation measures be included in a plan in order to establish the basis for a long-term adaptation strategy.

- ***Need to Incorporate Adaptation into the Calculation of Burden.*** Some participants noted that the concept of burden sharing and the principle that no region or sector should bear an unreasonable burden should be applied to the effects of climate change as well as the costs of mitigation. In particular, it was suggested that the North and the coasts might be expected to bear an unfair share of the burden of adaptation, which may suggest a need for transition assistance.

- ***Need to Improve Information.*** There was a broad view that more research was needed to improve understanding of climate change impacts at the sub-regional level, including the associated social, political and economic implications. The federal government was urged to continue and expand funding for monitoring impacts, collaborate with vulnerable communities/regions and in particular with First Nations. Some frustration was expressed with the trend of disinvestment in relevant research at a time when an understanding of climate change impacts is supposedly high on the agenda.

3. REGIONAL ISSUES AND VARIATIONS

Although a number of fairly consistent key messages did emerge from the workshops (as captured in the previous section), the individual workshops were quite distinct in terms of the content and tone of the discussion. In addition to variations in level of support for ratification (see below), there were important differences in circumstances (e.g. energy sources, industry base, socio-cultural environment) that were reflected in the discussion.

3.1 NEWFOUNDLAND AND LABRADOR

- ***Concerns About Impacts on Oil & Gas Industry.*** Given the importance of this new industry to the provincial economy, several participants were concerned that impacts be appropriately reflected in the analysis, and that whatever approach is taken, it not place an unreasonable burden on the industry or significantly impede investment.

- ***Interest in Developing Technology Niches.*** There was strong encouragement for government to support technology development. Despite concerns about picking "winners", the view was that there were some niches that were particularly worthy of government support.

- ***Strong Interest in Facilitating Hydro Development.*** Several participants noted the opportunities and the barriers to developing hydro potential in Labrador.

3.2 NOVA SCOTIA

- ***Concerns About Impacts on Oil & Gas, Electricity Generation and Petroleum Refining.*** These sectors were highlighted as important economic drivers that are particularly vulnerable to increased costs and foreign competition.

3.3 PRINCE EDWARD ISLAND

- ***Interest in Improved Access to Electricity.*** Participants noted the advantages of electricity over current energy sources but identified barriers to accessing supplies through the Québec grid.

- ***Interest in Renewables.*** There was general agreement that PEI's wind energy potential, in particular, should be further developed.

- ***Importance of Transportation.*** Participants noted that transportation makes up a very large proportion of provincial emissions and this is an area where there may be opportunities that could be explored, in conjunction with neighbouring jurisdictions.

3.4 NEW BRUNSWICK

- ***Access to Natural Gas.*** Participants noted the advantages of gas over current energy sources, but identified barriers to accessing supplies from Nova Scotia.

- ***Concerns About Impacts on Electricity Generation, Pulp & Paper and Petroleum Refining.*** These sectors were highlighted as important economic drivers that are particularly vulnerable to increased costs and foreign competition.

3.5 QUEBEC

- ***Interest in Opportunities for Hydro-Electricity and Renewables.*** Several participants noted that there was still significant potential for hydro and other renewable energy sources, both in Quebec and in other provinces.

- ***Support for "Polluter Pays" Principle.*** There was broad and varied support for the principle of "polluter pays" and in particular for the auction approach to the allocation of permits.

3.6 ONTARIO

- ***Strong Criticism of Modelling.*** Industry participants in Toronto were particularly critical of the modelling exercise, assumptions and the results, which in their view underestimates the impacts on competitiveness. Some made reference to alternative analysis. Particular concerns were expressed about the effects of the fiscal rule (e.g. on GDP) masking adverse impacts on productive capacity in Canada. Others identified a variety of gaps and suggested that the analysis provides insufficient information for decision-making.

- ***Concerns About Impacts on Resource Industries and Manufacturing.*** These sectors were highlighted as important economic drivers that are particularly vulnerable to increased costs and foreign competition.

3.7 MANITOBA

- ***Interest in Opportunities for Hydro-Electricity.*** The potential to expand hydro-electricity capacity in Manitoba was noted but so were the constraints, including limited capacity and infrastructure for inter-provincial transmission. There was also a view that hydro has environmental and social issues associated with it and that care should be taken in marketing it internationally.

- ***Concerns About Impacts on Mining, Agriculture and Transportation.*** These sectors were highlighted as important economic drivers that are particularly vulnerable to increased costs and foreign competition. At the same time, it was noted that there were important opportunities in the area of agricultural sinks and transportation demand management.

- ***Concerns about Impacts of Sinks Credits.*** Some participants expressed concerns about the impacts of sinks credits on farm incomes, limits on production and use of sinks by future owners. Others noted that there are risks and liabilities in relying on sinks from forest management. The need to take into account possible sinks debits (e.g. forest fires) as well as credits was also noted.

- ***A focus on Small and Medium- Sized Enterprises (SMEs).*** SMEs account for close to 90% of the business operations in Manitoba, and participants emphasized the needs, opportunities and risks for SMEs in the design and implementation of both DET and targeted measures.

3.8 SASKATCHEWAN

- ***Strong Opposition to DET.*** Participants in Regina were particularly critical of the DET concept, arguing that it is too complex, burdensome, and represents a tax on efficient operations.

- ***Concerns About Impacts on Oil & Gas, Mining, and Steel .*** These sectors were highlighted as important economic drivers that are particularly vulnerable to increased costs and foreign competition.

- ***Need to Clarify Sinks Ownership Issues.*** Although participants were supportive of the inclusion of forest and agricultural sinks as DET offsets, several noted that the uncertainty of sinks ownership acts as a barrier to further investment in this area. The importance of incentives to maintain sinks was also emphasized, as was the need to recognize efforts since 1990 that have already created sinks.

- ***Contribution of Agricultural and Forestry Sinks.*** It was suggested that with the right incentives, activities to enhance agricultural sinks could make an important contribution to meeting emission targets. The need to link afforestation to long term sustainable forest management objectives and planning for the forest industry was emphasized. Some participants stated that the ownership of sinks and offset credits needs to be assigned to farmers and other landowners.

3.9 ALBERTA

- ***Additional Focus on Modelling.*** Industry participants raised concerns around modelling , assumptions and the results, which in their view underestimated the impacts on competitiveness. It was suggested that little new could be learned in overall GDP effects and that modeling efforts could be focused more specifically on the sectors of importance in different provinces and territories.

- ***Concerns About Impacts on Oil & Gas, Electricity Generation, Chemicals.*** These sectors were highlighted as important economic drivers that are particularly vulnerable to increased costs and foreign competition.

- ***Interest in Energy Intensity Targets, Longer Timelines and Negotiated Covenants.*** Although industry participants did not necessarily endorse the Alberta Plan, there was strong interest in these aspects of the Plan.

- ***Concern About Unreasonable Burden on Alberta.*** Many participants noted that under any scenario, Alberta industries would face very difficult conditions. In the Alberta context, this includes, for example, the "go – no go" aspect of decision-making for large resource projects. Participants generally felt that the federal government had not explained how it would deal with this in the context of the principle that no region should bear an unreasonable burden.

- ***Some Support for Alberta Taking More Responsibility.*** Some ENGOs noted that Alberta had the capacity and the responsibility to do more than other provinces and should bear a greater burden under the "polluter pays" principle.

3.10 BRITISH COLUMBIA

- ***Strong Support for Targeted Measures.*** Participants in Vancouver tended to be less supportive of DET and more supportive of the use of TMs than others. Many felt that TMs designed to meet multiple policy objectives should be favoured, with DET used to fill the gap.

- ***Some Support for Permit Auctions and Recycling.*** There was some support for a system of auctioning permits under DET to comply with the "polluter pays" principle and to provide revenues that could be recycled to mitigate impacts on low-income households and to redress regional inequalities.

- ***Concern About Sinks Ownership.*** There was a strong view that credit for sinks should belong to forest and other landowners.

3.11 YUKON

- ***Strong Support for Targeted Measures.*** Participants in Whitehorse had a strong preference for TMs over DET.

- ***Concern About Energy Costs and Burden Sharing.*** Participants noted that the effect of most options would be to cause a significant increase in already high energy costs driving away investment and adversely Northern communities and individuals.

- ***Interest in Opportunities.*** Participants noted that the Yukon had an opportunity to develop adopt new approaches and new technologies without the necessity of dealing with existing stranded assets. In particular, it was noted that there were opportunities for the development of renewable energy sources.

3.12 NORTHWEST TERRITORIES

- ***Concern About Lack of Specific Analysis of NWT.*** Participants noted the lack of detailed analysis of the NWT economy and the risks that this entailed.

- ***Concerns About Impacts on Natural Gas, Mining.*** These sectors were highlighted as potentially important economic drivers that are particularly vulnerable to increased costs and foreign competition. The concern is that action on climate change might impede northern development opportunities in these areas.

- ***Concern About Energy Costs and Burden Sharing.*** Participants noted that the effect of most options would be to cause a significant increase in already high energy costs driving away investment and adversely Northern communities and individuals.

- ***Strong Support for Targeted Measures.*** Participants in Yellowknife had a strong preference for TMs over DET. In particular, there was interest in measures designed by and for the North.

3.13 NUNAVUT

- ***Concern About Modelling Assumptions for Nunavut.*** Participants were concerned that assumptions made for purposes of modelling impacts on the Nunavut economy were not sufficiently detailed or accurate.

- ***Interest in a North of 60 Plan.*** There was general support for the consideration of a North of 60 component of a National Plan. It was felt that this might allow for better recognition of regional realities with respect to energy-dependencies, and the overall economic and social contexts.

- ***Strong Support for Targeted Measures.*** There was strong support for TMs as a means of achieving reductions while mitigating negative impacts and promoting appropriate development.

- ***Concerns About Impacts on Potential Mining and Oil and Gas Developments.*** The concern was that action on climate change might impede developments in these areas, and the associated economic benefits in a region of limited opportunities.

- ***Potential Impacts on Sovereignty.*** It was noted that climate change impacts could cause changes (e.g., the opening of the Northwest Passage for shipping, changes in land use and occupancy) that have implications for sovereignty.

3.14 ABORIGINAL ISSUES

Issues of particular interest to First Nations were raised in several different jurisdictions.

- ***Concern About Respect of Rights.*** Several participants noted the importance of respecting inherent and treaty rights in the development of policies affecting First Nations. It was also noted that climate change might itself affect the viability of some aspects of land claims agreements.

- ***Interest in Developing Opportunities.*** Participants expressed a strong desire to work in partnership with governments to exploit opportunities for technology development and the use of renewables.

- ***Concern About Climate Impacts on Traditional Cultures.*** Several participants expressed a fear that increasing impacts of climate change would impede traditional activities that in many aboriginal communities remain fundamental to the way of life.

- ***Need for More Effective Engagement of First Nations.*** It was noted by several participants that information on options and analysis needed to be better designed to meet the needs of aboriginal participants. There was a view that a separate consultation process would be preferable.

4. NEXT STEPS

The results of these workshops will inform the development of the next iteration of a draft implementation plan for meeting Canada's Kyoto commitments, which is to be presented to Energy and Environment Ministers in October 2002. At the same time, the workshop results will also provide context for bilateral and multilateral discussions between the federal government and provincial and territorial governments, during the summer. The draft plan is expected to provide a basis for a second round of discussions with stakeholders and the Canadian public.

APPENDIX A
List of Background Documents

List of Background Documents

1. BACKGROUNDERS

- International Context. National Climate Change Secretariat.
- Science, Impacts and Adaptation. National Climate Change Secretariat.
- National Climate Change Process. National Climate Change Secretariat.
- Size of the Challenge. National Climate Change Secretariat.
- Targeted Measures. National Climate Change Secretariat.
- Domestic Emissions Trading. National Climate Change Secretariat.
- International Price of Carbon. National Climate Change Secretariat.
- Co-Benefits. National Climate Change Secretariat.
- Public Consultations. National Climate Change Secretariat.
- Cleaner Energy Exports and Global Environmental Benefits. National Climate Change Secretariat.

2. FEDERAL DISCUSSION PAPER

- Discussion Paper on Canada's Contribution to Addressing Climate Change. Government of Canada.

3. AMG ANALYSIS

A. Analysis and Modelling Group Summary of Analytical Results

- The Economic Impacts of Kyoto: Background Information. Analysis and Modelling Group
- A Guide to the Assumptions and Methodology underlying the AMG Results. Analysis and Modelling Group -.

B. Competitiveness Consideration

- Improving Understanding of the Kyoto Protocol Impacts on the Competitiveness of Canadian Industry: Summary of Findings. Analysis and Modelling Group - May 2002
- Improving Understanding of the Kyoto Protocol Impacts on the Competitiveness of Canadian Industry: Interim Report. Analysis and Modelling Group. April 30, 2002.

C. Competitiveness Background Studies

- The Kyoto Protocol and Industry growth Opportunities. Environment Affairs Branch - Industry Canada. April 25, 002.
- The Impacts of GHG Abatement Measures on the Canadian Manufacturers of Cement. Manufacturing Industries Branch - Industry Canada. April 4, 2002.

- The Impact of GHG Abatement Measures on the Canadian Industrial Chemicals Industry. Manufacturing Industries Branch - Industry Canada and Analysis and Modelling Group - Natural Resources Canada. February 8, 2002.
- The Impact of GHG Abatement Measures on the Canadian Mining Industry. Analysis and Modelling Group – Natural Resources Canada. June 6, 2002.
- The Impact of GHG Abatement Measures on the Canadian Primary Aluminum industry. Manufacturing Industry Branch – Industry Canada. March 11, 2002.
- The Impact of GHG Abatement Measures on the Canadian Automotive Industry. Aerospace and Automotive Branch – Industry Canada. March 2002.
- Greenhouse Gas Emissions and the Canadian Fertilizer Industry.
- The Impact of GHG Abatement Measures on the Canadian Industry of Pulp, Paper and Paperboard Mills. Manufacturing Industries Branch - Industry Canada. March 11, 2002.
- The Impact of GHG Abatement Measures on the Canadian Manufacturers of Steel Mill Products. Manufacturing Industry Branch – Industry Canada. March 11, 2002.
- The Impact of GHG Abatement Measures on the Canadian Upstream Oil and Gas Industry. Analysis and Modelling Group – Natural Resources Canada. May 8, 2002.

D. Provincial/Territorial Main Drivers

- The Main Drivers Study Overview Document. The Centre for Spatial Economics. May 13, 2002.
- The Main Drivers Study. The Province of Newfoundland and Labrador. The Centre for Spatial Economics. May 18, 2002.
- The Main Drivers Study. The Province of Prince Edward Island. The Centre for Spatial Economics. May 18, 2002.
- The Main Drivers Study. The Province of New Brunswick. The Centre for Spatial Economics. May 18, 2002.
- The Main Drivers Study. The Province of Nova Scotia. The Centre for Spatial Economics. May 18, 2002.
- The Main Drivers Study. The Province of Quebec. The Centre for Spatial Economics. May 18, 2002.
- The Main Drivers Study. The Province of Ontario. The Centre for Spatial Economics. May 18, 2002.
- The Main Drivers Study. The Province of Manitoba. The Centre for Spatial Economics. May 19, 2002.
- The Main Drivers Study. The Province of Saskatchewan. The Centre for Spatial Economics. May 19, 2002.
- The Main Drivers Study. The Province of Alberta. The Centre for Spatial Economics. May 19, 2002.
- The Main Drivers Study. The Province of British Columbia. The Centre for Spatial Economics. May 19, 2002.
- The Main Drivers Study. Yukon Territory. The Centre for Spatial Economics. May 19, 2002.
- The Main Drivers Study. The Northwest Territories and Nunavut. The Centre for Spatial Economics. May 20, 2002.

4. WORKSHOP PRESENTATIONS

- Overview of the National Climate Change Process. June 2002.
- Analysis and Modelling. National Stakeholder Workshops. Analysis and Modelling Group. June 7, 2002.
- A Discussion Paper on Canada's Contribution to Addressing Climate Change – Presentation.
- Impacts and Adaptation
  - St. John's, Newfoundland
  - Whitehorse, Yukon
  - Iqaluit, Nunavut
- A Series of Seven Posters depicting the Regional Impacts of Climate Change in Canada
  - Nunavut
  - Northwest Territories
  - British Columbia
  - Prairie Provinces
  - Quebec
  - Ontario
  - Atlantic Canada
- Provincial government presentations (in language of delivery)
  - British Columbia Climate Change Presentation. June 10, 2002.
  - Government of the Northwest Territories Climate Change Initiatives. June 13, 2002.
  - Alberta's Climate Change Action Plan. June 14, 2002.

5. SUPPLEMENTARY DOCUMENTS ON CLIMATE CHANGE

- Government of Canada Action Plan 2000 on Climate Change.
- Canada's National Climate Change Business Plan 2002.
- Quebec Action Plan on Climate Change 2000-2002.
- New England Governors/Eastern Canadian Premiers – Climate Change Action Plan 2001. The Committee on the Environment and the Northeast International Committee on Energy of the Conference of New England Governors and Eastern Canadian Premiers. August 2001.
- Manitoba and Climate Change – Investing in our future. September 2001.
- Albertans and Climate Change – A Plan for Action.

APPENDIX B
Summary of Attendance

Summary of Attendance

Workshop city	Total # invited	CIVIL SOCIETY						INDUSTRY						
		Expert	*ENGOs*	*Consumers*	*Municipalities*	*Other*	***Sub-total Civil Society (ex. experts)***	*Industry/ business associations*	*Resource sector firms*	*Manufacture, transport firms*	***Sub-total Industry***	**Total All Stakeholders**	**Total Government Participants**	**Total Stakeholder and Government Participants**
Vancouver	**122**	6	9	2	1	2	14	5	19	5	29	49	12	61
Calgary	**107**	7	8	1	4	6	19	13	15	5	33	59	18	77
Regina	**60**	2	8	2	3	0	13	6	7	0	13	28	24	52
Winnipeg	**87**	2	17	2	2	3	24	4	9	0	13	39	20	59
Montréal	**78**	7	5	0	2	4	11	8	8	2	18	36	19	55
Toronto	**176**	9	9	0	2	4	15	25	9	8	42	66	11	77
Ottawa	**98**	5	7	1	1	5	14	24	4	0	28	47	20	67
Fredericton	**80**	6	5	1	1	2	9	3	8	2	13	28	13	41
Charlottetown	**14**	0	4	0	1	0	5	0	2	0	2	7	6	13
Halifax	**44**	2	3	0	0	1	4	6	6	1	13	19	13	32
St. John's	**32**	1	2	1	2	1	6	6	3	3	12	19	9	28
Yellowknife	**36**	0	7	0	1	1	9	3	5	0	8	17	5	22
Whitehorse	**46**	0	5	1	0	2	8	2	4	0	6	14	10	24
Iqaluit	**29**	2	0	0	0	1	1	2	0	0	2	5	6	11
TOTALS	**1009**	**49**	**89**	**11**	**20**	**32**	**152**	**107**	**99**	**26**	**232**	**433**	**186**	**619**

APPENDIX C
Schedule of Workshops

Schedule of Workshops

June 7, 2002	Ottawa, Ontario
June 10, 2002	Vancouver, British Columbia
June 10, 2002	St. John's, Newfoundland
June 11, 2002	Whitehorse, Yukon
June 12, 2002	Halifax, Nova Scotia
June 13, 2002	Yellowknife, Northwest Territories
June 14, 2002	Calgary, Alberta
June 14, 2002	Charlottetown, Prince Edward Island
June 17, 2002	Regina, Saskatchewan
June 17, 2002	Fredericton, New Brunswick
June 19, 2002	Winnipeg, Manitoba
June 19, 2002	Montreal, Quebec
June 21, 2002	Toronto, Ontario
June 24, 2002	Iqaluit, Nunavut

APPENDIX D

Summary of Written Views Received

Full submissions can be found in the language of delivery at http://nccp.ca/NCCP/national_stakeholders/final_e.html

Organization	Key Messages
Alberta Chamber of Resources	• Supports examination of non-Kyoto options • Resource competitiveness is of primary concern, four options do not address this • GHG reductions are overestimated • Scale-back factor could jeopardize development • More micro-economic analysis required • Need clear plan for consumer involvement and behavioural change
Association de l'industrie électrique du Québec	• Supports ratification • Supports Option 4 • Concerned about allocation formula (should include non-emitting electricity sources) • Concerned about streamlining approval processes for hydro projects • Recommends evaluation of hydro potential across the country • Recommends financial support for transmission lines
ATCO Power	• Concerned that analysis does not address sectoral or regional implications of the options • Concerned about impacts on access to and cost of capital and effect on share value • Supports perspective contained in Alberta Plan esp. longer timeframe • Supports submissions of EPCOR, CEA, CAPP and recommends the concerns be addressed before considering ratification
Atomic Energy of Canada Ltd. and Canadian Nuclear Association	• Notes lack of attention in Discussion Paper to nuclear energy • Notes the ongoing need for fuel switching to electricity • Notes also the potential for nuclear energy to produce hydrogen for transportation • Recommends additional incentives and mechanisms to encourage non-emitting electricity generation • Recommends installation of more CANDU units which could be put on line by 2009 • Concerned that Discussion Paper is deficient in detail and lacking in technical depth
B.C. Hydro	• Does not have a position on ratification • Prefers GHG performance standards as the policy instrument for the electricity sector • Supports single sectoral GHG intensity factor for output-based allocation • Any emission trading system incorporate price and liquidity safety valves • Mix of climate change policies should strive for a fair distribution of the emission reductions between different sectors
Benign Energy Canada	• Supports ratification without delay • Supports DET linked to international system with credits for renewable energy • Supports federal TMs (e.g. Wind Power Production Initiative) and encourages provinces to match these initiatives • Recommends a variety of tax incentives for renewable energy (enhance class 43.1, enhance CRCE and flow through shares, tax reductions, etc.) • Recommends subsidies to level the playing field with carbon intensive energy sources
Business Council of British Columbia	• Opposes ratification because of the lack of a credible plan, major competitors will not be bound by targets, and BC has fewer options than others to reduce emissions • Indicated that the discussion paper should consider non-Kyoto options, longer timeframe and investments in technology • Notes that permit auction is the equivalent of a carbon tax whereas gratis allocation would penalize new entrants • Notes that effectiveness of TMs is probably overestimated • Opposes Kyoto ratification but, if decision is made to ratify, recommends federal government alone be responsible to purchase foreign permits • Supports harmonized North American standards for vehicle fuel efficiency, support for public transit, tax changes for employer-provided transit passes, incentives for capture of landfill gases, focus on community energy planning and green power purchasing
Cameco Corporation	• Concerned that Canada has not included uranium exports in CEE definition • Concerned that risks of not meeting targets for AP2000 are not included • Concerned that risk of not obtaining CEE credits is not included • Concerned that offsets are not sufficiently defined • Concerned that timelines are unrealistic and will not provide appropriate incentives for technology development and deployment • Concerned about the absence of nuclear energy in the Discussion Paper.

Organization	Key Messages
Canadian Association of Petroleum Producers	• Concerned that all options have serious impacts on competitiveness – Option 4 includes a scale-back tax and is based on top down allocation • Recommends summer analysis focus on assessment and uncertainty of: cost of programs; GHG reductions; residual gap; required foreign purchases (and price); impact on investment climate (including burden of uncertain gap); and evaluation against policy objectives • Notes that domestic action would involve major reductions in consumer energy use and lifestyle changes • Concerned that targets be based on what is achievable using best practice technology and that the liability for closing the gap be paid for by the federal government • Stated the risk of not meeting the Kyoto target and the resulting long-term unassigned liability mean that non-Kyoto options should be considered • Concerned about addition of "polluter pay" principle in context of international markets where others do not face similar costs
Canadian Association for Renewable Energies	• Recommends government testimonials in support of renewables • Recommends renewable portfolio standards
Canadian Chamber of Commerce	• Does not support ratification • Concerned about severe impacts on competitiveness • Recommends focus on energy efficiency and intensity • Recommends voluntary approach • Recommends work with U.S. • Recommends longer timeframe
Canadian Chemical Producers' Association	• Canada should consider a plan which targets improvements in energy intensity performance and engages all consumers • Timeframe is unrealistic • Option 4 too intrusive in determining best technology • Emissions intensity is better approach
Canadian Clean Power Coalition	• Supports a long-term approach • States clean coal technology has great potential but not in Kyoto timeframe • Supports a multi-pollutant approach • Supports a federal-provincial compromise
Canadian Construction Association	• Concerned that there is insufficient information on the options to take a position • Supports voluntary approaches vs. regulation • Recommends realistic targets • Recommends consideration of competitiveness impacts and challenges of U.S. non-participation
Canadian Council of Chief Executives	• Concerned about several aspects of Kyoto Protocol (size of challenge, incompatibility with continental realities, ineffective as a global strategy, etc.) • Concerned that discussion paper downplays the challenge, fails to outline the mechanisms for individuals and companies to respond, relies too heavily on spending and tax increases, and would raise costs for Canadian firms beyond those of their competitors • Recommends "Made-in-Canada" strategy based on (1) public education and involvement; (2) strategic investments in energy efficient technologies; (3) a stronger commitment by industry; (4) a Canadian program on science and adaptation; (5) inter-governmental collaboration in transportation and urban design; (6) action at the community level; (7) a fiscal and business environment that encourages energy-efficient growth; and (8) Canadian leadership internationally

Organization	Key Messages
Canadian Electricity Association	• Concerned that analysis gives insufficient attention to effects in the near-term on investment, competitiveness and consumers and the requirement of remaking the capital stock. • Concerned that analysis fails to appreciate realities of electricity sector and impetus for more growth, more power, more emissions • Concerned that potential for clean coal technology, new hydro, new wind, coal retirement by 2012 is overestimate and alternative of permit purchases or imports of power are not in Canada's interests • Concerned that risks have not been prudently assessed, including price of carbon (blend of domestic and international), transaction costs, implications beyond 2012 • States that unrealistic timeline combined with very ambitious target make it impractical to achieve Kyoto • Recommends consideration of non-Kyoto options and of option offered by CEA
Canadian Energy Pipeline Association	• Concerned that analysis underestimates impacts and downplays required lifestyle changes and risks • Does not support the 4 options • Recommends more details on DET and more detailed discussions on sector covenants • Recommends incentives for methane reduction programs • Recommends accelerated depreciation for energy efficiency investments • Recommends support for CO2 capture and storage
Canadian Fertilizer Institute	• Concerned about increased costs and impacts on Canadian economy • Recommends credit for Clean Energy Exports for fertilizer industry • Recommends longer timeframe to develop new technology • Need to resolve technical and legal issues related to agricultural sinks • Need to recognize voluntary best practices
Canadian Gas Association	• Concerned that natural gas appears to be most adversely affected sector • Concerned about impacts on competitiveness in Canada • Recommends national energy technology strategy • Recommends private-public partnerships to promote appropriate energy management decisions
Canadian Hydropower Association	• Notes the significant advantages of hydropower over alternatives such as coal and natural gas • Recommends that the federal government encourage and ensure the development of hydropower • Recommends removing regulatory obstacles that make it easier for coal-fired stations to receive environmental approvals
Canadian Lime Institute	• Feels that climate science is not conclusive enough to warrant costly measures • Concerned that options proposed will increase costs vs. U.S. and jeopardize survival of Canadian industry
Canadian Manufacturers and Exporters	• Concerned that analysis lacks credibility and severely underestimates impacts • Concerned that most options are variation of tax and regulatory approaches not based on encouraging technology solutions • Concerned that DET is an inefficient version of a carbon tax • Supports TMs for investment in technology, energy efficiency and fuel switching and tax measures for capital investment/turnover • Opposes transfer of money to other countries instead of investments in Canada • Does not support Option 4 but recognizes this option is moving in the right direction
Canadian Nuclear Association	• Concerned that analysis underestimates the impacts • Supports enhanced public education on mitigation actions • Recommends emission credit trading as a transition to cap & permit system • Recommends reconsideration of emissions trading at personal level (e.g. automobiles) • Supports TMs that emphasize technology for the long term • Recommends integrating Alberta Plan into federal plan.

Organization	Key Messages
Canadian Oilwell Drilling Contractors - Atlantic Division	• Notes the growing importance of the offshore drilling industry on the east coast to exports and security of energy supply • Concerned that proposed options will penalize efficient and growing industries • Notes that Nova Scotia is in a particularly bad position because activity was not part of the 1990 baseline and production is relatively higher cost • Concerned that Option 4 will add costs not faced by foreign competitors • Recommends consideration of Alberta or U.S. approaches
Canadian Oilwell Drilling Industry	• Concerned that climate change policies will shift production to other nations while doing nothing to reduce global emissions • Recommends decision based on regional and sectoral impacts, without constraint of artificial deadlines
Canadian Steel Producers Association	• Opposes ratification • Concerned about major negative impact on steel producers and manufacturing base – the current approach fails the test of undue burden • Recommends more meaningful consultation with industry sectors • Recommends investments in technology vs. buying international permits • Concerned that Option 1 is a carbon tax; Option 2 needs more precision; Option 3 places an undue burden on the manufacturing sector; and Option 4 fails to address competitiveness concerns and imposes unreasonable costs • Recommends pursuing industry sector specific arrangements
Canadian Trucking Alliance	• Opposes Option 1 which would not affect activity but replace Canadian trucks with US trucks • Supports Option 2 with focus on key TMs in Transportation Table report • Supports intermodal links vs. modal shift • Supports removal of regulatory barriers for LCVs and wide profile tires • Supports incentives for anti-idling devices and scrappage of older vehicles
Canadian Urban Transit Association	• Notes the importance of urban passenger travel to GHG emissions and the economic, social and environmental benefits of transit • Supports Option 2 because of the prospect of co-benefits for Canadian cities • Supports various transportation measures but primarily recommends additional investment in transit infrastructure and services as well as a more extensive list of transit-related measures, including those identified by the Transportation Table (e.g. transit fare smart cards, employer provided tax exempt transit benefits, transit pricing, etc.)
Canadian Vehicle Manufacturers' Association	• Concerned that despite many shortcomings, the analysis indicates significant impact on competitiveness and unacceptable burden on various sectors and regions • Recommends a hemispheric approach based on technology development, voluntary initiatives, carbon management technologies and science • Concerned that DET is an inefficient form of carbon tax and allocation methods all have problems • Concerned about TMs that would call for unique standards or requirements in Canada. • Recommends incentives (e.g. tax credit) as opposed to feebates • Recommends retaining revenues in Canada
Cement Association of Canada	• Concerned that options do not deal with innovation and competitiveness and are not harmonized with NAFTA trading partners • Concerned that more information is needed to demonstrate how GHG markets will achieve environmental goals while allowing the cement industry to have a future • Recommends the use of sectoral agreements between government and industry • Recommends support for industry R&D • Recommends TMs be considered from lifecycle perspective • Concerned that a Kyoto approach will shift cement production to other countries

Organization	Key Messages
Centre patronal de l'environnement du Québec	• Apprehensive about the small scale of the Canadian market • Questions how the federal government can constitutional dictate to the provinces the process to be followed regarding fossil fuel exploitation on its territory. Situation has created a high level of uncertainty and negatively affecting investments • Doubtful sinks inventory can be carried out in time for FCP • Deplores document's lack of long term vision • Considerable reduction effort will be required in transportation sector, in particular road transportation
EPCOR	• Concerned about lack of information on modelling assumptions, methodologies and implications • Concerned that Kyoto target is not achievable in the 2012 timeframe • Notes that none of the proposed options meets the test of "no region should be unfairly burdened" • Recommends that non-Kyoto discussion papers be included in consultations • Recommends open market trading but questions federal appropriation of sinks under current actions • Recommends federal government direct funds to technology investments as opposed to international purchases
Falconbridge Limited	• Concerned about impacts on competitiveness • Recommends incentives for energy audits • Recommends elimination of capital taxes on metering, energy management systems, and energy efficiency equipment • Recommends improved CCA • Recommends elimination of policy barriers to recycling • Recommends consideration of covenants approach
Fording Coal Limited	• Does not support ratification • Timeframe too short for achieving Kyoto objectives and does not allow for technology introduction • Consumers need to be fully engaged • Analysis required relating to the "leakage" issue
Gas Métropolitain	• Concerned that natural gas appears to be penalized although the reason is unclear – need more detailed discussions • Modelling of costs appears incorrect • Allocation of emission permits needs to be fair across different industries (e.g. electricity and gas) • Supports offsets (e.g. for energy efficiency credits) • Recommends TMs to extend availability of gas, to support cogeneration • Supports purchases of international emission permits if necessary
Hydro-Québec	• Supports ratification • Recommends review of regulatory burden for new hydro development • Recommends study of hydro potential across the country • Recommends gratis allocation of permits be based on a single performance criterion for power industry (not segmented) and allocation of permits to hydropower • Supports CEE credits
Imperial Oil Limited	• Opposes Kyoto because it would have minimal effectiveness in mitigating climate change but would seriously restrict Canada's potential for economic growth • Concerned that the analysis does not assess the impact on economic potential due to a cap on energy use nor does it include consumer welfare costs • Concerned that Option 1 relies primarily on purchases of international permits • Concerned that Option 4 introduces a tax (scale-back factor) that will increase costs compared to competitors • Concerned that allocation mechanism will become a very cumbersome arbitrary process • Concerned about risks to competitiveness, risks related to the price of carbon and the open-ended exposure to unknown second commitment period obligations

Organization	Key Messages
IPSCO Inc.	• Opposes ratification of badly flawed Kyoto Protocol • Concerned about serious harm to IPSCO and like manufacturers • Concerned that fixed emission cap under Kyoto will require ongoing per capita reductions as population rises • Concerned that increased reliance on heavy oil and tar sands will increase emissions while cost of permits will continue to rise year-by-year • Concerned that analysis underestimates economic impact • Notes U.S. and Alberta approaches which focus on R&D and energy efficiency technologies
Manitoba Hydro	• Notes the advantages of hydropower • Notes the enormous long term potential for expansion of hydropower • Supports an emissions trading system that delivers a clear advantage to renewable resources • Recommends an efficient regulatory system • Supports adequate inter-provincial transmission capacity
Mining Association of Canada	• Concern about trade, competitiveness and innovation, discrepancy between discussion paper and AMG mining sector study • Strategic investments in development and adoption of energy efficient technologies • All fiscal and regulatory options need to be examined which create a favourable environment to attract investment and reduce GHG emissions • Energy efficiency should become a standard benchmark for corporate competitiveness • Lifecycle approach to emission reductions
Nova Scotia Power	• Concerned that analysis provides insufficient information to inform investment community about impacts at the sectoral or corporate level • Concerned about reduced access to capital and increased cost of capital • Recommends fiscal reforms to provide accelerated depreciation of existing assets and enhanced CCA for new investments • Supports an open and efficient system of emissions trading and offsets such as approach advocated by CEA (in particular Emissions Performance Equivalence Standard)
Nexen Inc.	• Opposes ratification of Kyoto because it is fundamentally flawed • Concerned that challenge has not been well communicated to Canadians • Concerned that adding costs to producers will only shift production elsewhere • Concerned that Kyoto target represents a limit on the size of the Canadian economy • Concerned that discussion paper underestimates the challenge, leaves an unassigned liability, and obliges Canada to purchase expensive "hot air" • Recommends Made-in-Canada strategy proposed by the Canadian Council of Chief Executives
Saskatchewan Chamber of Commerce	• Opposes ratification • Recommends that governments support incentives for energy efficiency and conservation to reduce emissions and remain competitive with U.S. • Recommends thorough evaluation of costs and communication to the general public • Recommends support for improving science of climate change evaluation
SaskPower	• Recommends more micro-economic assessment of options • Concerned that short-term potential for technology and renewables has been overestimated • Concerned about stranded capital and costs associated with phasing-out coal • Concerned about increased import of GHG-intensive electricity from U.S. • Concerned about use of natural gas benchmark and scale-back factor for DET allocation • Concerned that expected reductions from AP2000 and Budget 2001 are optimistic
Telestrips Inc.	• Should target emissions reductions in "on-road" emissions, including telecommuting programs

Organization	Key Messages
TransAlta Corporation	• Concerned that none of the Options are likely to address major impacts on competitiveness • Concerned that none of the Options deal with inequitable burden (in particular the unfair burden on the thermal electricity sector) • Notes that 900 year supply of coal is part of Alberta advantage but Clean Coal Technology will not make a significant contribution until after 2012 • Opposes the use of auction in emissions trading (carbon tax!) • Concerned that the gap is underestimated and the effectiveness of measures are overestimated • Concerned about lack of transition plan and longer strategic framework • Opposes ratification and recommends a longer timeframe
Transport 2000 Canada	• Supports CANet principles (50% reduction in long term, ratify now, reject Alberta Plan, reject CEE credits, most reductions in Canada) • Supports broad application of DET to cover transportation sector • Recommends significant use of TMs for transportation sector • Recommends promoting reduced distances, modal shift, urban transit, rail, level playing field, limits on road construction, preservation of railway rights of way • Recommends domestic actions vs. international purchases
Canadian Institute for Environmental Law and Policy	• Support a campaign to have the UN or a reconstituted UNEP seek an opinion from the International Court of Justice on how to proceed with a public sustainability impact assessment
David Suzuki Foundation	• Canada should immediately ratify Protocol • Alberta strategy would lead to increases in GHG, deprive Canadians of the benefits of improved air quality and increase responsibility for emission reductions in the rest of Canada • Abandon cleaner energy export credits • Achieve Canada's Kyoto target mainly in Canada
Ontario Clean Air Alliance	• Supports immediate ratification • Recommends examining costs and benefits of phasing-out coal-based generation in Ontario – using energy efficiency, renewable power and natural gas
The Pembina Institute	• Concerned that analysis fails to consider several factors (innovation, competitive positioning, health co-benefits, etc.) • States that arguments based on competitiveness have important flaws (U.S. withdrawal has reduced costs, many other factors affect investment decisions, U.S. is taking some action on climate change, narrow definition of competitiveness) • Supports immediate ratification • Opposes CEE credits • Recommends mandatory DET system with declining cap, significant use of auction, phase-out of gratis allocation over a few years, minimum reliance on credits • Recommends focus on regulatory and financial incentive type TMs to increase use of renewables, implement efficiency standards, implement transportation package
Pollution Probe	• Supports ratification • Indicates that costs are manageable • Concerned that costs of inaction and co-benefits have not been addressed • Recommends more work on DET • Opposes CEE credits and supports domestic action over purchase of international emissions permits • Recommends TMs in electricity, industry, transportation and buildings
Sierra Club of BC	• Supports ratification as foundation for greater reductions beyond 2012 • Supports domestic reductions vs. international purchases • Supports DET if domestic only • Supports incentives for renewable energy and energy efficiency • Supports discouraging investments in fossil fuels • Supports education to encourage energy conservation ethic

Organization	Key Messages
West Coast Environmental Law	• Recommends an approach designed for long term reductions in Canada • Supports Option 1 DET system with some recycling, if necessary, to most affected provinces, low income and rural Canadians • Recommends a surcharge on international permits to encourage domestic investment • Opposes output-based allocation (option 3 and 4) because of administrative complexity, cost, and lower effectiveness in shifting economy • Opposes CEE credits • Is concerned about the use of offsets particularly if DET is narrow in application
Yukon Conservation Society	• Supports ratification • States that costs are negligible compared to potential impacts • Concerned that federal government has no intention to ratify • Supports looking beyond Kyoto • Opposes CEE credits • Supports a mix of broad DET (with auction) and selected TMs
Canadian Centre for Policy Alternatives	• Supports ratification • States that economic impacts are negligible • Opposes CEE credits • Supports Option 1 (BaP DET with auctions) and recycling to transition programs (for workers and communities) • Indicates impact on energy costs is reasonable but recommends assistance for low-income Canadians • Supports domestic vs. international action
Clean Air Renewable Energy Coalition	• Recommends increasing the value of Wind Power Production Incentive to 2.7¢/kwh • Recommends expansion of incentives to other renewable resources • Recommends including renewable energy in definition of offsets for DET • Recommends expansion of Market Incentive Program to provide broader Consumer Green Energy Rebate and Education program • Recommends wind mapping initiative
ENJEU, The Canadian Youth Summit Team for Johannesburg	• Concerned about distribution of costs and benefits among generations • Opposes CEE credits • Recommends targets for post 2012 • Opposes DET between industrial sectors • Supports TM in Option 2.5 developed by Guy Dauncey (www. earthfuture.com) • Supports domestic reductions
GSX Concerned Citizens Coalition	• Supports ratification without delay • Supports planning for longer term • Rejects Alberta Plan • Rejects CEE credits • Supports DET if focus is domestic and includes real caps • Recommends support for technology and renewables
Guy Dauncey, Sustainable Communities Consulting	• Also need to concentrate on methane reductions: landfills, fugitive emissions & nitrous oxide • Energy Efficiency Tax • Fuel efficiency requirements in new cars • 10% renewable energy portfolio standard
Lynn Ross Consulting	• Concerned about insufficient consideration of finance, trade and industry perspectives • Concerned about lack of transition strategy and long term focus • Concerned that BaP DET would lead to significant fuel price increases – recommends recycling to provinces • Concerned about government ability to implement all reductions using TMs • Recommends fiscal/tax policies to encourage innovation • Recommends establishing sector targets and agreements • Opposes CEE credits • Concerned about ability to establish intensity factors for Option 4 – may be unworkable • Recommends Option 2 as transition plan with Option 4 (minus CEE credits) later

Organization	Key Messages
Mouvement Au Courant	• Concerned that effort being proposed is insufficient and is based mainly on buying international permits • Recommends analysis examine what could be achieved with 15% or 0% growth as opposed to 29% • Supports use of broader measures of well-being than GDP
New Brunswick Lung Association	• Concerned that the analysis does not examine health co-benefits • Recommends looking beyond Kyoto • Notes that options 2 and 3 appear to be token options only • Recommends purchases of international emission permits as a last resort only • Supports mix of DET, measures to support innovation and energy efficiency, and new offsets
Saskatchewan Soil Conservation Association	• Notes distinction between emission reduction credits and removals (which must reflect cost of maintaining the sink) • Recommends that landowners own the sinks • Recommends offsets with distinction between reductions and removals • Concerned about government claiming sinks in BAU and AP2000 • Recommends treating sink offsets as storage lease as opposed to commodity trades
Sierra Youth Coalition	• Supports adherence to Kyoto approach • Concerned about over-emphasis on competitiveness and industry concerns • Concerned that analysis does not account for many benefits • Concerned about giving more weight to regional burden distribution as opposed to generational distribution and the polluter pays principle • Opposes CEE exports and recommends most reductions take place in Canada • Recommends urgent action to move to a minimum of 60% reduction and a more ambitious green vision
Environmental and Resource Studies, Trent University	• Notes that climate change will create $22 billion in benefits to Canada which in combination with $8.5 billion in estimated costs results in net benefit of $13.5 billion. • Notes that this translates to $3.5 billion in additional revenue for federal government • Recommends this be used to fund incentives for emission reductions • Concerned that potential for landfill gas emission reductions has been underestimated
Department of Economics, University of Guelph	• Concerned that the economic information is completely inadequate for a policy that has economic implications akin to Canada-U.S. Free Trade • Concerned that proposals are not remotely cost-effective • Opposes ratification • Proposes to outline problems in more detail in forthcoming assessment to be published by the C.D. Howe Institute
World Federalists of Canada	• Supports ratification this summer • Opposes options that dilute domestic responsibility including CEE credits
World Youth Organisation on Climate Change	• Supports ratification • Concerned that the costs of climate change have not been recognized • Opposes CEE credits • Notes that the Kyoto Protocol is only a first weak step - recommends Canada prepare for 50-80% reductions • Supports Option 2 to achieve highest possible reductions in Canada • Recommends priority be accorded to: development of low emission technologies for electricity generation, transportation modal shift away from cars, increasing vehicle fuel efficiency, emission reductions vs. sinks
Nova Chemicals	• Opposes ratification • Concerned about non-value adding costs not faced by competitors outside Canada • Concerned about ability to grow into and expand production at new $1B facility in Joffre, Alberta • Recommends portfolio of incentives to encourage voluntary emissions reductions, such as element of Alberta plan

Organization	Key Messages
Bob Hicks	• Recommends a new plan: Plan 100 • Plan 100 would be based on each sector's percent contribution of GHG emissions and percent progress in meeting targets • Plan 100 would monitor 45 initiatives that target key sectors representing 90 percent of emissions and report on the rest • Supports elimination of unnecessary idling as example in the Transportation sector
Canadian Automobile Dealers Association	• Supports an approach that does not differ greatly from US jurisdictions • Supports incentives for owners to retire older vehicles • Opposes feebate system • Supports education of consumers on fuel efficiency
Federation of Canadian Municipalities	• Supports sharing the burden of upstream emissions by allocating those emissions to consuming provinces (and sectors) • Supports using investment in sinks to diversify rural economies • Believes Option 4 is the most realistic and should be the focus for additional analysis • Concerned that municipalities be included in development of DET system through offsets • Supports TM focus on landfill gas capture, urban planning and CHP systems. This will be addressed in the FCM Business Plan to be presented in September 2002 • Supports ratification and five principles adopted by FCM
Noranda Inc.	• Concerned that target is not achievable and that competitiveness impacts and leakage are underestimated • Concerned that DET impacts would be similar to a carbon tax • Supports certain fiscal measures to encourage efficient technologies • Concerned about risk of government purchases of international permits • Concerned that any of the four options would shift production and GHG emissions to other countries • Recommends alternative approach with early implementation of "no regrets" opportunities, including measures on metal recycling.
Aluminium Association of Canada	• Supports measures to encourage innovation and energy efficiency • Believes proposed DET permit allocation mechanisms (options 3 and 4) merit consideration • Concerned that scale-back provisions would penalize industry which is already planning to implement BAT – given the life-cycle benefits of aluminum, this would be counter-productive • Concerned that burden-sharing scheme be fully transparent • Supports encouragement and recognition of early action • Proposes to enter into discussions with federal government to place agreement with Québec on a national footing
Lowell R. Campbell and Marlene A. Campbell	• Support ratification of the Kyoto Protocol • Concerned that Canadian level of consumptions is not sustainable • Oppose efforts to obtain CEE credits • Support domestic action and initiatives, polluter pays, and consistency with national policy goals • Concerned about excessive or unnecessary support to industry that has the capacity to adopt better practices • Concerned that judgment of cost-effectiveness of public funding be made by experts

APPENDIX E
Workshop Reports and Attendance

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE OTTAWA WORKSHOP
HELD ON JUNE 7, 2002 AT THE CHATEAU LAURIER

1. INTRODUCTION

The Ottawa workshop was attended by approximately 50 participants from a range of industry sectors and business associations, environmental NGOs, and aboriginal organizations. This report is accompanied by a separate list of the organizations represented at the meeting.

2. VIEWS ON THE ANALYSIS

Numerous participants congratulated the Analysis and Modeling Group (AMG) for progress in the modeling work, resulting in a better understanding of implications of the modeled cases. A number of participants also raised concerns about assumptions used, or about perceived deficiencies in the analysis. Discussion often strayed into policy issues, since some participants spoke in terms of a need to model policy alternatives.

Concerns about assumptions

- There was general questioning about whether current actions and credits (i.e., Action Plan 2000/Budget 2001 and sinks) will yield 74 MT of reductions.
- Questions were raised about the international price of carbon -- $10 and $50/tonne -- selected for modeling. Some participants argued that $10 is too high for the low-end, and that $50 is well above a reasonable upper limit. Others argued that there will be upward pressure on the price, and $10 is too low for planning purposes.
- There were also questions about the validity of the assumption regarding a relatively rapid shift to low emissions technologies etc. in response to the policy measures that had been modeled.
- A question was raised about whether expansion of nuclear technology in the period 2009 – 2012 had been factored into the analysis.

Other comments

- Several participants questioned whether the modeling adequately characterized benefits and costs:
  - In the view of some participants, benefits are underestimated because the stimulus to innovation, the emergence of new markets, and significant health and other co-benefits, are not included; and modeled options do not reflect avoided costs of climate change impacts.
  - Others believed that negative economic impacts are underestimated due to: inadequate reflection of sectoral realities; and insufficient accounting for transaction and adjustment costs. A number of participants also expressed the view that the models did not reflect the reality of business/investment decision-making processes and timelines for capital stock turnover. Some industry participants expressed skepticism that impacts will be as small as the models predict, and raised concerns that the macroeconomic results mask very significant sectoral and regional impacts.
- There was a general sense that accounting for impacts on competitiveness was inadequate, but opposing views on what those impacts will be:

- Some suggested that there would be improvements in competitiveness associated with innovation, the use of leading edge technologies, and a low-emissions economy.
- Others held that negative impacts on competitiveness would result, in part because of disincentives to investment and capital flight.
- the efforts made to date be considered a beginning.

- There was general concern that modeling assumed no change in Canada's Kyoto target beyond the first commitment period. The probability of long-term structural changes in the economy was noted; and the need for clearly crafted policy beyond the first commitment period was emphasized by a number of participants.
- Concerns were expressed about the uncertainty and the fluctuating nature of "business-as-usual" (BAU) emissions estimate, as a basis for estimating the gap that must be addressed.
- There was concern about the lack of explicit accounting for different approaches to burden-sharing.
- There was also questioning of the validity of some of the sectoral results; and specific examples of some anomalies were noted. Concerns were also expressed over the large shifts that have occurred in the estimates for some sectors.
- A strong concern was expressed regarding the lack of accounting for significant uncertainties and associated risks. It was suggested that the following areas of uncertainty imply substantial risks:
  - The assessed gap
  - The ability to achieve 74 MT from current actions and credits
  - The status of clean energy export credits negotiations
  - The international price of carbon.
- Another perspective was that there was significant risk of losing a technological edge by not taking action.

Suggestions for future work

Government representatives at the meeting noted the intention to model a preferred option or plan that they will craft following these consultations. This plan could include elements that participants have noted are missing from the options that have been modeled to date. There was strong general agreement among stakeholders on the need to flesh out assumptions for modeling beyond the first commitment period. There was also support for the view that some things cannot be modeled; and that there is a need for ongoing policy dialogue to explore the implications of options (and in fact, one participant questioned the need for additional modeling). The following additional points were made by participants:

- There is a need to work further with the AMG, to explore in detail what lies behind the results (implicit and explicit assumptions); and to improve how modeling reflects business decision-making.
- There is interest in looking at: outcomes associated with different approaches to revenue recycling; the implications of different approaches to the allocation of burden; and the role of burden-sharing policies in mitigating disproportionate sectoral/regional impacts.
- There is a need to reflect risks associated with uncertainties.

3. VIEWS ON THE OVERALL APPROACH OF THE FEDERAL DISCUSSION PAPER

The paper was commended as a good basis for making progress. However, concerns were expressed regarding individual measures, and the way that measures were "packaged" as options. Some participants suggested that Option 4 touched on certain considerations that were useful for developing a plan.

Areas of apparent convergence

There was general agreement, though for different reasons, that any reconfigured options package should include a version that does not assume any credit for clean energy exports (CEEs).

- Some participants held that CEEs are not a valid source of credit, are costing Canada credibility and good will internationally, would weaken the overall effect of the protocol, and are not needed to achieve Canada's commitments. Further, they would like the federal government to indicate that its commitment to Kyoto is not contingent on such credits.
- Other participants did not question the merit of credits for CEE, but stated that such credits are not a given, and in fact, Canada is unlikely to be successful in its attempt to gain them.

There was general support for the six policy objectives stated in the Federal Discussion Paper; and also a call for more explicit reflection of these objectives in the assessment of the policy options. It was suggested that option 4 and other options that emerge be assessed against objectives (e.g., which options best satisfy the goal to achieve a majority of reductions domestically, the goal of moving Canada to a less carbon-intensive economy, etc.) to enable a clearer sense of trade-offs, and to promote a more integrated Canadian response to climate change.

As noted under the AMG section, there was also general agreement about the need to look beyond the first commitment period (i.e., to define strategies for and implications of the probable reality of the need for more aggressive reductions after the first period).

Additional points

- Some participants called on the federal government to make clear its commitment to ratify the Kyoto Protocol.
- Northern aboriginal groups recognize that climate change impacts will be significant in the North, but the region also has major oil and gas potential. Inuit perspectives on options are needed.
- It is important to be very concrete about how growth/new initiatives will be accommodated. There are some good signals in option 4, but insufficient detail.
- There is need for more explicit treatment of uncertainties and the associated implications for Canadian competitiveness. How should the risks be managed, and who will cover associated liabilities? Will government indemnify sectors/firms that do not meet targets?
- Significant opportunities in various sectors (e.g., transport, municipalities) should be more fully fleshed out and modeled. There also needs to be a better understanding of

what is reasonable to expect of the electricity sector.

- Creative thinking is needed in terms of how to spread benefits out through the economy.
- It was noted that the policy principle of "polluter pays" implies unequal sectoral impacts. Some participants felt that the principle should be strictly applied.
- The response to climate change must include adaptation, not just mitigation. The linkages between adaptation and mitigation need to be explored/modeled.
- A concern was expressed about the lack of emphasis in Option 4 on strategies that engage the sources of the 58% of emissions that will not be covered by DET. In other words, true implementation of targeted measures needs to be based on approaches that get people involved. Specific ideas included linkages into the urban agenda, and elaboration of a "bio-economy" concept. It was also suggested that engagement be through sectoral agreements and covenants, rather than through command-and-control approaches.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Domestic Emissions Trading (DET)

Overview

There appeared to be fairly broad, but not universal, support for some form of DET. Reservations about DET related to the level of government intervention required, the associated administrative and transaction costs, and the associated potential to create disincentives to investment. On the other hand, some participants felt that reliance on "covenants" alone would be more bureaucratic and burdensome than DET.

On the design of DET, some industry participants were opposed to the "broad as possible"/auctioning approach in Option 1. On the other hand, another participant stated that: this DET design best supports the polluter pay principle; gratis allocation should be seen as a transitional element that would be phased out; and the system should overwhelmingly be based on cap and trade, with an absolute overall cap on domestic permits.
The fact that the DET approach in Option 4 recognizes the need to accommodate growth was felt to be a positive step by industry participants. Some also felt that the "best available technology" (BAT) approach has merit. However, one participant suggested that BAT "at reasonable cost" is not enough of a stretch target and experience has shown that more could be achieved with a stronger target.

Allocation was seen by a number of participants as the central issue in DET design. One participant argued that the key issue with respect to DET is really not so much the design of the policy instrument, but whether targets set are realistic. Account must be taken of how much can reasonably be achieved from industry without seriously affecting competitiveness; and more clarity must be provided on the level at which the cap might be set, and how it will be allocated. It was suggested that decisions should be based on discussions at the sector and even the firm level.

There was apparent general support for the use of offsets, and recognition that the market could effectively stimulate reductions in offset sectors. However, emphasis was given to the need to get the rules right to ensure that reductions are additional and real. It was suggested, for example that benchmarks should be established to ensure real reductions from BAU. Suggestions were also offered on how to address offsets (especially sinks) with differing relative certainty and

permanence. One suggestion was to heavily discount such offsets. Another view was that defensible reductions estimates could be established based on more research, some of which is already underway in the international arena. The question of liability for any uncertainty was raised as an issue to be resolved.

Additional Views

- DET must be supplemented by other measures.
- System design should promote a lifecycle approach. For example, manufacturers should be able to benefit from downstream emissions reductions associated with their products. This would provide incentives to promote consumer uptake of lower emissions technologies. It was also suggested that offsets be extended to areas such as recycling.
- System design should reflect the realities of lead-time requirements for technology phase-out, including taking account of "sunk capital" (which may limit how quickly BAT can be adopted). Transitional approaches may be needed.
- Surprising levels of reduction are often possible when requirements are stringent.
- It was suggested that the "scale-back" factor (in Option 4) is essentially a tax on business because it will not be possible to squeeze more out if BAT is already being employed. It could also penalize firms that are early adopters of BAT.
- It was noted that if performance levels are set too high, they will create disincentives to invest in Canada. This could drive investment, hence emissions, elsewhere; and may actually have the opposite effect to that desired, when considering emissions on a global level.

4.2 Targeted Measures

Overview

There was apparent general agreement that targeted measures (TMs) have a role to play. It was suggested that their uptake will depend both on policy design, and levels of government commitment. It was noted, for example, that federal fiscal incentives will be important for significant progress in some areas. There was also an expressed need for a clear framework to ensure consistency in defining and evaluating coherent "packages" of targeted measures. This framework should reflect links between TMs and other aspects of governments' agendas (e.g., innovation, urban sustainability).

There was some concern expressed about the assumption in the Discussion Paper that targeted measures are a more expensive way of achieving reductions. It was noted that some targeted measures (e.g., efficiency standards) have proven to be no- or low-cost. During the course of discussions, representatives of several sectors -- including oil & gas, transportation (rail, truck, auto), and municipalities -- identified the potential for significant opportunities in their sectors. Others, such as electricity, suggested expectations are optimistic. Divergent views also emerged on some specific potential measures such as road pricing and mandatory building codes. In addition, questions were raised about what can be reasonably achieved within the time-frame of the first commitment period under the Kyoto Protocol.

Additional Views

- Fuller development and costing of measures is essential.
- TMs should not be restricted solely to non-covered sectors. Additional incentives for DET-covered sectors can be important to facilitate transitions.
- More attention should be paid to ensuring that options developed through issue tables are picked up.
- Incremental but real gains are possible; don't only look for big bangs. Build on existing and emerging alliances between governments and between sectors, and provide incentives for further action.
- Any incentives should be tied to the achievement of targets (i.e be performance-based).
- Measures should influence not only direct actions, but also supply-chain decisions (e.g., procurement policies).
- Successful implementation in some sectors may require trade-offs within federal areas of responsibilities (e.g., changes to regulations that impede uptake).

4.3 Purchase of International Emission Permits

Overview

There were diverging views on this issue. Some participants felt that domestic action should have clear primacy in order to maximize the achievement of co-benefits, with international credits used only as a back-up if targets are not met after serious efforts to achieve reductions domestically. Others suggested that some target for domestic action should be established. (It was noted, for example, that the position recently taken by the board of the Federation of Canadian Municipalities is that 75% of total required reductions should be domestic). Conversely, some participants held that no constraints should be placed on the ability of companies or the government to act on cost-efficient international opportunities, and in particular to pursue opportunities through Joint Implementation (JI) and the Clean Development Mechanism (CDM). From another perspective, it was suggested that ratifying Kyoto would inevitably lead to a loss of domestically available capital, since there would be no option but to purchase offshore permits to meet commitments.

Although some participants were principally opposed to the purchase of international credits, there seemed to be general agreement that if any surplus permits were to be purchased from Russia and the Ukraine (so-called "hot air" credits), they should be "greened" by requiring that the funds be reinvested in emission reduction projects in those countries. There was some discussion about what greening would mean in terms of permit price. It was suggested that while "greening" would make surplus permits somewhat more expensive, the availability of hot air meant that the international price would be significantly cheaper than not having access to these permits at all.

Additional views

- Some participants held that the polluter pays principle implies a responsibility for polluters to address their own emissions. Others suggested that if the principle is to apply, polluters should be allowed to use least cost options.
- It was suggested that there are good policy reasons to pursue international mechanisms, for example: development cooperation and trade; incentives for Canadian innovation; and

improvements to environmental quality in developing countries.

- Some issue was taken with the implicit assumption that government expenditures for international credits would burden individuals (as taxpayers), while additional costs to business would not.
- It was noted that enhanced forest management activity is now entrenched via Kyoto; and that forest management credits would provide a means for firms to invest domestically, rather than spending for offshore credits.

5. PREFERRED OPTIONS AND MIX OF INSTRUMENTS

There was no additional discussion specific to this topic: but based on the general tenor of earlier discussion, there appeared to be general agreement on the need to continue looking at effective mixes of policy measures and design features, and not to consider existing options as set in stone. It was also suggested that other options that have been put on the table (e.g., options for specific sectors, such as the covenant approach developed by the Canadian Electrical Association) should be explicitly considered and modeled. Concerns over short-term and long-term risks and implications for Canadian business were again raised, with the explicit request that the Government agree to backstop liability. As a counterpoint, it was noted that Canada would not be alone in assuming risks, as there are many other countries entering into the Kyoto Protocol.

6. SUMMARY OF SOME KEY POINTS OF CONVERGENCE

- Continued policy uncertainty can have a negative impact on the economy in the short- and long-term. There is a need to resolve the uncertainty now.
- There is need to look beyond the first commitment period, and to be clearer on longer-term impacts.
- The dialogue on the implications of different approaches should continue.
- Options that do not assume credits for "clean energy export" should be developed and modeled.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – OTTAWA, JUNE 7, 2002

Aluminum Association of Canada
Association of Regional Railways of Canada
Atomic Energy of Canada
Canadian Arctic Resources Committee
Canadian Association of Petroleum Producers
Canadian Auto Dealers Association
Canadian Automobile Association
Canadian Chamber of Commerce
Canadian Chemical Producers' Association
Canadian College of Health Service Executives
Canadian Electricity Association
Canadian Energy Pipeline Association
Canadian Federation of Agriculture
Canadian Fertilizer Institute
Canadian Home Builders Association
Canadian Hydro Power Association
Canadian Manufacturers and Exporters
Canadian Medical Association
Canadian Steel Producers Association
Canadian Trucking Alliance/Ontario Trucking Association
Canadian Vehicle Manufacturers Association
Cantor Fitzgerald
Cement Association of Canada
Centre patronal de l'environnement
Climate Action Network
Conference Board of Canada
Council of Chief Executives
Dairy Farmers of Canada
Douglas Bradley & Associates
Federation of Canadian Municipalities
Forest Products Association of Canada
Greenpeace
GSCI
Imperial Oil
International Institute for Sustainable Development
Inuit Circumpolar Conference (Canada)
Mining Association of Canada
Ontario Power Generation
Pembina Institute

Petroleum Services Association of Canada
Railway Association of Canada
Sierra Youth Coalition
The Delphi Group
The Sierra Club of Canada
Transport 2000
Voluntary Challenge & Registry, Inc.

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE ST. JOHN'S WORKSHOP
HELD ON JUNE 10, 2002 AT THE DELTA ST. JOHN'S HOTEL

1. INTRODUCTION

The St. John's workshop was attended by 19 stakeholders from a range of industry sectors and business associations, environmental NGOs, academic institutions and aboriginal organizations. This report is accompanied by a separate list of the organizations represented at the meeting.

2. VIEWS ON THE ANALYSIS

Participants acknowledged the work of the Analysis and Modelling Group (AMG), had some questions of clarification on the details, and also raised concerns about assumptions used in the analysis, or noted areas of insufficient modelling analysis.

There were general concerns from industry about the ability of the modelling to reflect fully the impacts on competitiveness. Some participants wondered whether the lack of remaining energy efficiency opportunities in certain sectors given continuous improvements in past decades was reflected. Several participants inquired as to whether the models reflect the "price taking" behaviour of most commodity industries (e.g. inability to pass on any additional costs to customers). It was also suggested that access to foreign direct investment was a concern that the analysis could not fully deal with. There was a suggestion to have further work be done to examine this issue. Finally, there were questions about the reliability of the estimates for the price of carbon. One participant suggested that even the high end of $50 per tonne was too low, and that a $100 range would be more appropriate.

Other participants sought to understand the analysis in terms of impacts on consumers and households. This included questions about the extent to which higher energy costs would eventually be passed on to consumers. It also included a question seeking to know the impact of changing the "fiscal rule" to recycle revenues through corporate taxes instead of personal taxes under option 1.

While noting constraints on energy efficiency potential in some areas, some expressed the view that there were also significant opportunities for new technology. There was a general sense that these and other intangible factors were not included in the modeling (e.g. innovation capacity and opportunities, the potential for other competitive advantages, costs of inaction, and co-benefits from taking action).

The following views were also raised:

- The post commitment period (post 2012) should have been included in the reporting of the analysis since the assumptions about the longer term are important for policy development.

- The assumption that Targeted Measures (TMs) are always more expensive than emissions trading is not necessarily true; many TMs could be implemented at little or no cost.

3. VIEWS ON THE OVERALL APPROACH

Discussion of the overall approach followed presentations on the federal discussion paper and the Alberta Plan.

A number of stakeholders felt that the plan needed to look beyond the first commitment period, i.e. Kyoto post 2012.

There was also general agreement on the need to encourage technology development. Despite concerns about the pitfalls of "picking winners", the view was that there were possibly some niches that were worthy of government support. One participant emphasized the importance of investing in technology since the country lags behind other industrialized nations in technology innovation. Others noted the advantages of working domestically to achieve technology and industrial development objectives while pursuing GHG reduction objectives.

There was general agreement on the six policy objectives outlined in the discussion paper. However, one stakeholder noted the challenges and risks inherent in making decisions based on macro economic models, particularly when none of the options appeared to meet the policy objective of no region bearing an unreasonable burden. This lead to the suggestion that a ratification decision should be postponed, possibly to the next commitment period (e.g. by adopting an approach similar to the Alberta Plan). Others suggested that the risks of not taking action also merited consideration.

The following views were also raised:

- The approach should include investment in adaptation strategies.
- There is a need for a comparative examination of the Kyoto plans of other countries. Government representatives reviewed the current status of selected countries' Kyoto plans, noting that most countries have some form of DET, that TM approaches have a strong focus on technology innovation (fuel cells, photovoltaic, and nuclear), and some are choosing an international focus with CDM projects.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Domestic Emissions Trading

There was general agreement that some form of DET, along with some form of TMs, will be necessary. Many participants noted that a mixed approach (Option 3 or 4) including a form of DET would be preferable, since there is concern that even a broad DET system would not cover individuals and households. A few participants noted that Option 4 was preferred based on the understanding that this option is most friendly to future growth. There were specific concerns regarding competitiveness and the impact of the U.S. not being involved in a potential DET system. Participants noted that the key feature of any DET system for Canada should be flexibility, not too much bureaucracy, and the allowance for future growth.

Although DET was supported, the uncertainty about future permit costs was felt to be an important constraint on decision-making and analysis. It was noted that this may require a "leap

of faith", acknowledging that modelling cannot continue indefinitely.

4.2 Targeted Measures

There was general agreement that some form of TMs will be necessary. Participants noted that the most promising measures for Newfoundland would be:

- Hydro-Electricity production and transmission opportunities (Lower Churchill project and progress on east/west transmission could reduce Canada's GHG emissions by as much as 6%).
- Energy efficiency in buildings (residential and commercial) - of which only 3% are currently achieving an R2000 standard. However it was emphasized that building codes would not be as useful as providing more information and possibly a mandatory labelling system for new housing products, since most Newfoundlanders build their own homes.
- Fuel switching from oil to electricity, transferring some of the onus onto utilities to deliver on energy efficiency technologies or renewable sources such as hydro or wind.
- Incentives for the purchase of more fuel-efficient vehicles (tax approaches or incentives)
- Development of more fuel-efficient technologies for vehicles.

There was a view that increased sectoral regulations would not be as advantageous as market-based approaches and other incentives for TMs.

There was a broad consensus among participants on the importance of public education highlighting the need for action and fostering the take-up of measures at the personal or consumer level. One participant suggested public education and feedback on TMs could be facilitated through committees or advisory bodies between government and industry sectors/associations or consumer associations.

It was noted that TMs have the potential to greatly affect Canadians in rural areas, and it is through grassroots organizations in those areas that public education material can be funnelled to reach these communities. One stakeholder gave the example of recent climate change workshops in Labrador that identified impacts currently being experienced in Labrador such as changes in wildlife and birds, and changing weather patterns. It was noted that there are unique cultural impacts for aboriginal groups, and similarly there are concerns regarding the importance of making the TMs appropriate for rural and northern residents and aboriginal populations.

4.3 Purchase of International Emission Permits

Stakeholders noted a strong preference for domestic actions, to retain investments in Canada. There were numerous suggestions to examine the potential to bring money into the country through innovation and technology development, but it was also generally agreed that if the use of Kyoto mechanisms were necessary, investments in CDM projects were preferred over the purchasing of international permits.

5. PREFERRED OPTIONS AND MIX OF INSTRUMENTS

Participants generally felt that there was insufficient information and too many uncertainties to determine the preferred mix of instruments. Uncertainties include the price of carbon, and the

likelihood of successfully negotiating credits for Clean Energy Exports (CEEs). One participant suggested that the plan be designed with two scenarios, one with CEEs included, and one with them excluded. Others felt that Canada's lack of experience in implementing a DET system, and with some of the TMs, required that flexibility be an important component of the plan.

It was emphasized that public education needed to be an important part of any plan. One participant also noted the lack of younger stakeholders at the workshop, and emphasized the importance that efforts be made to consult with them.

There was also discussion pertaining to possible risks.

- One participant noted the vulnerability of the Newfoundland economy to the costs imposed by a Kyoto plan and particularly the oil and gas industry, which is high cost and fairly new to the province, and is on the verge of being a sustainable industry.
- Another participant noted that there are significant risks associated with the lack of a domestic implementation framework, since the uncertainty affects investors.
- A number of members agreed that there were risks involved with non-action (health effects, environmental impacts) that should be considered in the analysis.

6. IMPACTS AND ADAPTATION

The discussion on impacts and adaptation followed a presentation on this subject by a representative of the Geological Survey of Canada.

It was noted that there is some basic knowledge of the climate change impacts occurring in Newfoundland, and that adaptation strategies still needed to be developed. Because Newfoundland participates in the Canadian Climate Impact and Adaptation Research Network (C-CIARN), there is some understanding of the impacts (erosion, flooding, sediment removal, etc) and areas of vulnerability.

Some participants noted the importance of making progress on quantifying the cost of the impacts (direct benefits of a mitigation strategy) as well as co-benefits. One participant noted that one of the earlier presentations quoted co-benefits of $300 - $400 million in health costs savings, and wondered whether further work was being done on the benefits of avoiding impacts and adaptation. It was noted that longer inaction fosters greater costs.

The following views were also raised:

- One stakeholder noted that there are two typical public views of climate change: (1) that it is the source of all weather concerns; or (2) that it is a non-issue. He added that the non-profit sector is well placed to communicate with the public on impacts, adaptation, or TMs but they need resources to do it and continuity in that support.

- It was noted that the impacts of climate change included various costs (including adaptation) for many of the Newfoundland industries, including fisheries and offshore oil and gas.
- One participant pointed out the cultural impacts associated with climate change impacts, and the need to consider these in any action plan.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – ST. JOHN'S, JUNE 10, 2002

Atlantic Provinces Chamber of Commerce
Canadian Association of Petroleum Producers
Canadian Manufacturers and Exporters
Canadian Petroleum Products Institute
City of Mount Pearl
City of St. John's
Conservation Corps Newfoundland & Labrador
Eastern Newfoundland Home Builders Association
Johnson Inc.
Labrador Inuit Association
Memorial University of Newfoundland
Newfoundland and Labrador Environmental Industry Association
Newfoundland and Labrador Housing
Noble Drilling Ltd.
North Atlantic Refining Ltd.
PETRO-CANADA

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE VANCOUVER WORKSHOP
HELD ON JUNE 10, 2002 AT THE CROWNE PLAZA HOTEL GEORGIA

1. INTRODUCTION

The Vancouver workshop was attended by 56 stakeholders, from a range of industry sectors and civil society groups. This report is accompanied by a separate list of the organizations represented at the meeting. Opening remarks were given by Derek Thompson, Deputy Minister, British Columbia Ministry of Water, Land and Air Protection. British Columbia plans to conduct its own consultations (Targeted measures - June 21, DET - June 24, and sinks - July 11), and intends to develop its action plan and position on the federal Discussion Paper by the Fall.

2. VIEWS ON THE ANALYSIS

Comments on the analysis covered questions of clarification on methods and assumptions, comments on findings/results, and suggestions on directions for further modelling work.

Comments on assumptions:

Individual participants raised questions on the assumptions, including:

- Questions on the use of 1990 as the base year for the emission factor used in the output-based DET approach in the modelling work;
- Differing views on international permit price assumptions, with some participants suggesting that the $50 price scenario was unrealistic and should be replaced by a more realistic best-case scenario, and others indicating that it is important to consider that full range of risks.

Comments on the modelling approach:

A number of participants raised concerns that the modelling did not include health and other co-benefits, nor the potential economic and employment gains from introduction of new technologies and innovation efforts.

Participants raised issues about how well the models represent the structure and behaviour of the economy, including that:

- The models overstate consumer responses to price changes - for example, consumers have not responded to recent spikes in gasoline prices, although it is recognized that price changes do take time to affect behaviour;
- The dominant role of revenue recycling and inter-governmental income transfer has a strong bearing on the macro-economic modelling results and masks important sectoral results;
- There is scepticism that revenue recycling could result in an increase in personal disposable income; and,
- The models do not adequately reflect investment decision making.

Comments on results:

Some participants noted that most industries are price-takers, cannot pass on cost increases and, as a result, policy measures that increase costs will cause disinvestment in Canada rather than efficiency gains; however, it was noted that this applies to internationally traded commodities and that in the domestic market price rises will lead to reduced demand. Participants from the forestry and cement sectors raised concerns about the accuracy of B.C.-specific results, and it was suggested further disaggregation is needed to portray a clearer picture of impacts. Participants noted that impacts must be considered in the context of overall economic growth of 30% over the period in the business as usual base case. The view as expressed that this growth provides the opportunity to rebalance regional impacts through recycling of revenues.

Suggestions for future modelling:

There was general agreement that enough macro-economic modelling had been done, and now the focus should be on the design, analysis and costing of individual policy measures. However, participants also suggested a range of additional analyses for the next step including:

- Health and other co-benefits
- A targeted-measures-only scenario, and a scenario of all domestic action
- Alternative revenue recycling scenarios, to balance regional and sectoral impacts and consider actions on aboriginal lands
- Impacts on low-income families
- Impacts of the us-canada exchange rate.

The need for macro-indicators which go beyond the GDP, such as the Genuine Progress Indicator, was identified.

3. VIEWS ON THE OVERALL APPROACH

Following presentations by the Federal Government on its Discussion Paper, by the Government of British Columbia, and by the Government of Alberta on its plan, an initial intervention from the floor presented an additional approach to meeting the Kyoto target. This involved a series of targeted measures focused on reducing emissions of methane, nitrous oxide and synthetic GHGs (because of their high Global Warming Potentials), and gains in energy efficiency.

Comments on the overall approach to be taken in response to climate change focused on credit for cleaner energy exports, sinks, aspects of Alberta's proposed plan, the timeframe for action, and uncertainties and risks.

There were opposing views on the legitimacy and use of credit for cleaner energy (CEE) exports. Some argued that Canada had already made considerable gains in its negotiations in Bonn and Marrakech and does not need further concessions to succeed in reaching its Kyoto target. Others noted that, with the U.S. refusal to ratify, the economic picture for Canadian exports was radically different and such credits were needed to mitigate competitiveness concerns. There were questions raised as to how such credits, if achieved, would be distributed - either to reduce the overall level of reductions needed across the country, as suggested in the federal Discussion Paper, or to be re-distributed to the hydro and natural gas sectors providing the cleaner energy.

Concerning sinks, questions of ownership were raised. There was a strong view that credits for sinks should be returned to the forest and other landowners who generate them. The view that such credits should return to the provinces was also expressed.

Those who addressed the proposed Alberta Plan presented a range of views on it. It was pointed out that total GHG emissions would increase under such a plan, perhaps to 28-43% above the Kyoto target. There was criticism of the approach taken in the plan, which appears to shift responsibility for production-oriented emissions to the end-user and does not count emissions associated with the export of energy in the calculation of Alberta's emissions. Others felt, however, that this shift in responsibility to end-users was a good thing, in that this would provide an incentive for final consumers of the energy to reduce fuel use. The view was also expressed that attributing upstream emissions to final consumers would be administratively unworkable.

Perspectives on timelines were also raised including the need to look beyond the 2012 date in designing policy measures. It is also necessary to take account of the time needed for technology change and economic transformation, given the length of time required for capital stock turnover. There was also a question whether Alberta would act decisively to mitigate GHG emissions given its 2020 timeline.

There was a question raised about the federal government's ability to tax emissions from GHG-emitting activities on First Nations' territory. One participant asked that if Canada maintains its structural surplus, why do all the options in the federal Discussion Paper include full revenue recycling? Would it not be appropriate to use the surplus to fund necessary measures?

Support was also expressed for a sector-by-sector approach.

A number of aspects concerning risk and uncertainties were raised. These centred, on the one hand, around the need to recognize the risks in ratifying the Protocol and the need to manage them, on the other hand, and the need to recognize that there are also risks in not acting. The former include:

- Risks to competitiveness and impact on the equity valuations of Canadian businesses which could negatively affect investment
- The liability associated with potential increased costs for emissions reductions in projects planned to come on-line in the 2008 to 2012 timeframe
- The administrative risk or burden associated with implementing a range of targeted measures, whether implemented through voluntary programs or by law
- The risk that insufficient consumer and industry response rates to selected policy measures will prevent planned reductions from being achieved; for example, the effectiveness of some of the Action Plan 2000 measures was questioned.

The latter include:

- Recognition that climate change impacts will escalate, compound and be costly lost opportunity by not moving quickly to develop and take up new technologies
- Canada's international reputation and credibility would be damaged
- Canada has a responsibility to contribute to the multilateral efforts to deal with climate change, and to recognize that we will not easily be able to reverse negative effects from

climate change once they have occurred.

Beginning action immediately and taking an adaptive management approach to use lessons learned was noted as one way to manage risk.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.2 Domestic Emissions Trading (DET)

Overall, it was felt that DET needs to be seen as a tool and that objectives and then targets should be set out, and other tools examined, before any decisions on DET design are made. The views on the relative use of a DET system within an overall plan to achieve the Kyoto target were mixed. Some felt that an all-domestic actions approach that does not include DET should be favoured. Many felt that Targeted Measures designed to fulfill specific policy objectives should be developed first, and DET used "around the margins" to fill any gap. However, others made the argument that DET has the least economic impact and is the most efficient approach.

The following views on the design of a DET system were expressed:

Governments were encouraged to carefully examine lessons learned from existing emission trading schemes beyond carbon. The RECLAIM system in Los Angeles was suggested as a possible model.

There was some support for the auction of permits, as this would fulfill the "polluter pays" policy objective in the federal Discussion Paper, and would allow for revenue recycling to balance out regional inequalities and mitigate impacts on low-income households. The need for transition programs for communities and workers disproportionately affected by policies to reduce greenhouse gases was identified.
Concern was raised by some about DET loading costs onto industry, especially the cost of purchase for additional international credits if the target is not met. Participants asked how the emission factors in the output-based approach would be set, in particular about the definition and use of "best available technology".

There was recognition that Option 4 might better accommodate concerns about growth than the other DET approaches, but concerns were also expressed about the reduced incentive to switch to lower carbon fuels, especially in the electricity sector.

There was a view that a clear signal needed to be given very soon that a DET system would be put in place, followed by further work to finalize design. The need for clear rules to be established as early as possible was also identified.

4.3 Targeted Measures

Comments on the choice of targeted measures ranged from the view that there exists a large portfolio of targeted measures to choose from, both in Canada and in other countries, to the view that a full targeted measures approach is not the most efficient for large industry and needs to be complemented by a cap and trade system. The view that Targeted Measures are the most expensive approach was also challenged. There were strong representations to the federal

government to get involved in local level initiatives by, for example, tying their existing program disbursements to GHG reductions, and recycling revenues from gas taxes back into local transportation planning projects. The federal government should also use investment and procurement requirements.

Participants identified opportunities for targeted measures in a number of areas:

- Transportation - such as tax exemptions for transit passes, pay-as-you-drive insurance, parking pricing, ethanol, fuel efficiency standards, many of these based on the results of the Transportation Table which seem to have been lost
- Electricity - such as renewables portfolio standards, net metering, green power rates and conservation programmes
- Communities - such as land-fill gas recovery, community energy planning, and green buildings
- Industry - an emphasis on a sector-by-sector approach, and support for the use of tax credits and accelerated capital cost allowance.

Several participants identified the importance of drawing on past efforts such as the National Climate Change Transportation Table, B.C. Hydro's Conservation Potential Review, and B.C.'s GHG Action Plan.

Participants also identified a number of key issues in the approach to targeted measures:

- The importance of using co-benefits and sustainable development objectives as the drivers to engage individuals and organizations to act
- The need for coordination among levels of government
- The need for buy-in by the public which is paramount; this involves education and program design that gives consumers the choice to act responsibly, instead of being forced to change their behaviour, and in areas that improve their quality of life.
- For industry, sector-by-sector negotiation to set targets and allow firms to find least-cost solutions (an example being Alberta's Clean Air Strategic Alliance initiatives to reduce flaring and fugitive emissions in the oil & gas sector).

The approach to targeted measures should be a two-step process: target the sub-account in national GHG inventory, and then focus on which government measures should be implemented to reach this target. Focus on where bigger reductions can be made first, and plan in a timeframe that allows for longer-term reductions.

4.4 Purchase of International Emission Permits

There was convergence around the view that Canada should primarily focus on domestic action. Some participants said that a Canadian plan should involve no international trading to meet its Kyoto targets. Participants noted the advantages of increased co-benefits from domestic action, a desire to keep investment in Canada, the responsibility Canada has to deal with its own emissions, and the need to generate on-the-ground changes on how we use and produce energy.

There was, however, some support for the view that a balance needed to be struck between benefits of domestic action and the need to acquire least-cost tonnes of reductions. An additional view was that the opportunity for credits arising from CDM and JI projects should not be overestimated, since such projects must be financially viable in their own right.

5. MIX OF INSTRUMENTS

Discussion on the overall design of a national plan centred around public engagement, the need to address co-benefits as well as adaptation, and a focus on domestic action. There was substantial common view that use of targeted measures should be the focus with DET having a supporting or complementary role and international permit purchases to fill the remaining gap, if necessary. There was, however, some support for Option 1, especially if revenues can be recycled to negatively impacted regions and low income households.

A number of participants identified the need for a national Kyoto implementation plan to include adaptation. Others identified important areas of co-benefits related to agriculture and forest practices and reducing impact on such fisheries as salmon. Other views raised were:

- There has been a lack of public engagement on the issue. Governments should be making a "pitch" to the Canadian people to encourage action and inform about major changes to come
- The federal Discussion Paper focuses disproportionately on industry and not enough on the consumer side of the equation.
- A view was expressed that there needs to be a commitment by the federal government to take on liability associated with any gap in achieving the Kyoto target on behalf of the Canadian people if Canada ratifies
- There is a need to understand possible trade implications under NAFTA and WTO of proposed policy measures.

The need to realistically consider the capacity for the Canadian economy to adapt over 10 years to meet the Kyoto target was reiterated. It was noted that much of the needed technology would need to be purchased from off-shore or would need considerable R&D to bring to market. Conversely, a number of participants felt that implementing a plan would create opportunity and innovation in the Canadian economy, and that if programs to inform and engage the public were part of a Plan, the benefits would be far-reaching.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – VANCOUVER, JUNE 10, 2002

Alcan
BC Lung Association
BC Automobile Association
BC Gas
BC Hydro
BC Public Interest Advocacy Centre
BC Utilities Commission
Better Environmentally Sound Transportation
Calpine Canada
Canadian Association of Oilwell Drilling Contractors
Canadian Association of Petroleum Producers
Canadian Centre for Policy Alternatives
Canadian Energy Pipeline Association
Canadian Petroleum Products Institute
C-CAIRN BC
CME British Columbia Division
David Suzuki Foundation
Duke Energy Gas Transmission Canada
Ethanol BC
Fording Coal
Greater Vancouver Regional District
Greenhouse Gas Emissions Management Consortium
GSX Concerned Citizens Coalition
Guy Dauncey
I.R.M. Consulting
Lafarge Canada Inc.
Lehigh Northwest Cement Ltd. (formerly Tilbury)
Lightyear Technologies
Lignum
Methanex Corporation
MWA Consultants
NorskeCanada
Pacific Fisheries Resource Conservation
Petroleum Services Association of Canada
Roosendal Farms
RWDI West Inc
Shell Canada
Sierra Club of Canada, BC Chapter
Sierra Legal Defence Fund

Sierra Youth Coalition
Society Promoting Environmental Conservation
Teck Cominco
Translink
Victoria Transport Policy Institute
West Coast Environmental Law
Weyerhaeuser Canada

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE WHITEHORSE WORKSHOP
HELD ON JUNE 11, 2002 AT THE WESTMARK HOTEL

1. INTRODUCTION

The Whitehorse workshop was attended by 15 participants from a range of stakeholder groups including industry and environmental NGOs, and from aboriginal organizations. This report is accompanied by a separate list of those organizations attending the meeting. Opening remarks were given by Dale Eftoda, Minister of Environment.

2. VIEWS ON THE ANALYSIS

Discussion of the analysis highlighted the need for further work on identifying local impacts (especially in the mining and tourism sectors and at the community level), benefits and co-benefits, and the use of the personal tax system in the models.

- There was general concern that the macroeconomic results mask local economic impacts on the Yukon, the North and small communities. Some participants also questioned whether the AMG results adequately address possible impacts on service-oriented and community-based businesses in the Yukon and noted the need to separate out impacts on tourism. A disconnect was noted between the statement in the AMG's Main Drivers report that the Yukon is the "least affected of the least affected jurisdictions" and the likelihood of significant impacts on the mining and tourism industries due to GHG reduction measures.
- Several participants asked whether co-benefits were specifically addressed in the analysis (e.g. health impacts, technology innovation, etc.). Some participants encouraged such co-benefits to be factored into further cost-benefit analysis. Others felt that the best place to address co-benefits was in the design of policy measures.
- A view was expressed that the analytical models do not sufficiently "reflect reality" of different business sectors.
- Several participants, both industry and NGOs, questioned the use of the personal income tax system as the mechanism for revenue recycling in the models. They encouraged the AMG to model other strategies for use of revenues collected by governments as well and to carefully consider implications of recycling tax measures for income distributions in the North and burden sharing. There was a view expressed that "polluter" provinces/territories should bear more of the cost of reductions (at least in the short term). Special consideration will also need to be given to possible implications for First Nations with income tax sharing agreements in place with the federal government.
- *Suggestions for Future Modelling* - Suggestions for future modelling included: showing the effect of the models on income distribution, looking beyond GDP as an indicator and using a tool such as the Genuine Progress Indicator to model possible effects of implementing GHG reduction policies, and extracting results directly relevant to the Yukon and its communities and to First Nations.
- A view was also expressed that not much more could be learned from further macroeconomic modelling and that efforts should now be directed at developing and analyzing policy measures, especially those that yield co-benefits.

3. VIEWS ON THE OVERALL APPROACH

- Overall, there was a preference amongst stakeholders for an approach focusing primarily on targeted measures and secondly on domestic emissions trading. International permit purchases were seen as an "escape valve", to be used if required at the end of the 2008 – 2012 reporting period. However, it was also stated that some industry sectors believe that domestic action will not cover the entire gap and that some international permit purchases will be required.
- A view was expressed that governments should focus on energy efficiency, conservation, fuel switching and keeping industry and innovation in Canada.
- There was a view by some that the overarching objective is for Canada to ratify first, and then develop an action plan.

Policy Objectives

- There was strong support for the inclusion of an additional objective focusing on the need for long term action (e.g. beyond 2012). There was general agreement that any plan to address climate change must take a long term view supporting future innovation, continued reduction and long term solutions leading to non-fossil energy and/or sequestration of CO_2 (e.g. in limestone). This will influence decisions on the best mix of options (e.g. a focus on targeted measures that encourage long term technological and behavioural change).
- The policies chosen to reduce GHG emissions must be consistent with other policy goals.
- Two additional policy objectives were suggested:
  - Applying the precautionary principle, and
  - encouraging innovation and opportunities for innovative people in the North to develop new approaches, e.g., related to renewable energy..
- There was a considerable convergence of views on the importance of ensuring that consumers/end users are an important part of the overall approach. Behavioural changes are fundamental to emission reductions and must be directly encouraged. The need to improve information-sharing techniques was highlighted to support a more informed Canadian public.

Key Issue

- Burden sharing was a key concern of several participants. Of particular note was the need to consider distribution of impacts at the community and individual level, e.g., the effects of fuel pricing on First Nations communities and low income earners.
- The perspective was raised that those industries/provinces that have contributed more GHGs and that have historically benefited from GHG emissions should bear a larger share of the burden of reducing emissions than those who have not (e.g. North, low income earners).
- It was urged that there be consideration of the impacts of competitiveness on the North, highlighting concerns that decisions taken in the south could have a negative impact on the North, e.g., by raising already high fuel prices and driving away further investment. Others noted the potential for innovation and technology in the North (e.g., renewable energy).
- Economic differences between the Canadian North and South, and between urban and

rural regions of the country, were highlighted by several participants. Differences within the Yukon economy were also noted (e.g., between Whitehorse and "rural" Yukon). These need to be considered in drawing up policy measures and actions to reduce emissions.

- Participants generally agreed that burden sharing should be a primary focus of discussion as a climate change plan is drafted. Key considerations include: Who is responsible? How can responsibilities be differentiated? Who is able to act and to what degree?

Other Comments

- There was concern expressed from a number of participants about the costs of further delay in a decision on ratification.
- *Sinks* - Several participants questioned whether sinks credits are "real" reductions. They argued that reductions will not occur unless new sinks are created and Canada should not receive credit for existing sinks. If sinks credits were realized, participants questioned who (e.g. First Nations, provincial government, industry, etc.) would receive the credits.
- Competing objectives for First Nations (and Canada) were noted by some participants: can First Nations meet climate change objectives on their land (e.g. create additional sinks) and use the land for other economic or traditional use uses (e.g. hunting, forestry)?
- *Cleaner Energy Exports* – A question was raised whether Cleaner Energy Exports represent "real" reductions and a view expressed that they will contribute to reductions only if they displace "dirty energy".
- There was particular concern that First Nations lack the capacity to act on climate change but that it is important and necessary that they act and be part of the overall solution. Issues such as distribution of costs and revenues, impacts on communities, distribution of impacts and potential opportunities for sharing and building expertise need to be addressed.
- First Nations communities expect to be consulted before policies/programs are implemented.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Domestic Emissions Trading

Participants generally felt that domestic emissions trading should play a supporting role in meeting emissions targets. They raised a number of more specific points:

- A potential strength of a DET system is that "reductions would make economic sense".
- Some Concerns were raised about the effects of emission trading as a mechanism for passing on costs of meeting Kyoto commitments and the impact on fuel prices in the North compared to other parts of Canada, with consequent large impacts on competitiveness and investment in the North, and on low-income and First Nation communities.
- Any permit system should not penalize or negatively impact companies who have taken early action on climate change.
- The need to involve First Nations in a trading system was identified. Key issues to be resolved include how First Nations could be involved and who would receive credit for forest sink projects. Further consultation with First Nations is required on this matter, and

First Nations will need to be provided with the governance tools to implement climate change response measures.

- Some DET options may have too narrow a focus; a broad focus as in option 1 may be more appropriate.

4.2 Targeted Measures

Participants largely agreed that targeted measures should form the basis of Canada's climate change activities. They made the following suggestions:

- Targeted measures must be designed in a way that works the best for all of Canada, including the North. A "one-size fits all" approach cannot be used in the North where criteria for program funding designed for southern Canada may not be workable for the North.
- Synergy and interactions between different types of targeted measures should be a consideration in developing an approach (e.g. better insulation decreases furnace use, and reduces the benefits from improved furnace efficiency).
- The apparent "disconnect" between the support in the Discussion Paper of pursuing innovative technology such as CO_2 capture and storage, and the lack of research funding available was noted.
- Distinct action needs to be taken to encourage First Nations to become more involved in reducing GHG emissions. Targeted measures should be "bundled" to make them more available to First Nations and other small communities in the North.
- While many participants were concerned about the potential negative impacts on the North of decisions made in the South (e.g. increased fuel prices), there was a strong sense that opportunities exist in the North to support Kyoto and contribute to GHG reductions. For example, there is no large "legacy economy" in the Yukon leaving significant opportunity for creating new industry (e.g. renewable energy industry). Participants also noted that there are already "world class experts" in the North. There is a need for measures targeted at encouraging opportunity, innovation and capacity building.
- Most participants agreed that the targeted measures package should support community action and that there are opportunities for northern communities to participate in pilot projects (e.g. reduction of energy use) that could allow learning for projects in bigger centres.

4.3 Purchase of International Emission Permits

- Generally, participants supported a strong emphasis on domestic action rather than wide use of international emissions trading or the other Kyoto Mechanisms (e.g., the Clean Development Mechanism) as a way of meeting reduction targets. There was general agreement that international emission permits should not be built into any particular option, but should be used as an "escape valve" if reductions commitments cannot otherwise be met.
- Participants felt that Canada should be seen as a leader, both in terms of reducing its own emissions and in supporting technological innovation and reductions in developing countries. The "CATNAP philosophy" (cheapest available technology narrowly avoiding prosecution) should be avoided. There was general agreement that the use of Clean Development Mechanism and Joint Implementation must lead to real emission reductions

in other countries and should be used as a means of setting an international example, rather than primarily as a means of gaining emissions credits.

- One participant suggested that potential additional costs of "greening" hot air (by requiring reinvestment of funds in emission reduction projects) should be analyzed.

5. IMPACTS AND ADAPTATION DISCUSSION

- Participants noted the importance of monitoring for tracking impacts and change over time. There was concern with diminishing monitoring capacity in the North e.g. lack of comprehensive data sets and the dwindling number of monitoring stations in Canada.
- The efforts of the Arctic Council in environmental impact assessment and its work on adaptation were highlighted.
- There is a need to advance understanding of traditional ecological knowledge in the Framework Convention on Climate Change and the Kyoto Protocol and to integrate it into actions on climate change.
- It was also noted that aboriginal peoples are often portrayed as victims of climate change. There is a need to collaborate with aboriginal peoples to actively involve them in studies of community vulnerability to climate change (e.g. work underway at the Arctic Council). First Nations expect to be consulted on the outcomes of JMM discussions on adaptation.
- The need to focus on mitigation as well as adaptation (e.g. wildlife such as caribou cannot adapt to climate change as quickly as humans can) was stressed.

6. MIX OF POLICY INSTRUMENTS

- The discussion of on the preferred mix of policy instruments focused on the risks involved in meeting Canada's Kyoto target, and the risks of not ratifying the Protocol.

Risks of Not Ratifying the Protocol

- Some participants felt that the risks of not ratifying the Protocol are severe. Any trade-offs between reduced economic growth and environmental benefits are necessary to ensure the integrity of Yukon's environment for the future.
- Other participants noted that there is currently no international alternative to the Kyoto Protocol and not ratifying it could lead to many more years of discussion and inaction and consequently, additional and more significant negative environmental impacts such as drought, as well as greater costs to achieve reductions in the future.
- The need for Canada to continue to play a leadership role internationally and to provide an example for developing countries was stressed by some participants as well.
- Canada's treaty obligations related to safeguarding the environment for traditional uses were noted. Failure of governments to act could adversely affect the ability of First Nations to sustain their traditional lifestyles and economies and may be inconsistent with treaty obligations.

Risks of Ratifying the Protocol

- Risks to the competitiveness of Canadian industry and business (e.g. with the U.S. and more broadly internationally) must be considered in any solution.
- There is a potential risk of losing public support for reducing GHG emissions once the Protocol is ratified e.g. the public might see ratification as a signal that no further action is required. Further action is needed to better inform the public of the long term issues.
- The view was also raised that inequitable burden sharing is a high risk for First Nations and northern communities, and a question was posed about the responsibility of Canadian governments to take action, because of the risks from climate change to traditional livelihoods and northern environments.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – WHITEHORSE, JUNE 11, 2002

Arctic Athabascan Council
Canadian Association of Petroleum Producers
Canadian Energy Pipeline Association
C-CIARN
Climate Action Network
Council of Yukon First Nations
Energy Solutions Centre
Foothills Pipe Lines
Northern Climate Exchange
PEO Hub
Wilderness Tourism Association of the Yukon
Yukon Chamber of Commerce
Yukon Conservation Society
Yukon Fish and Wildlife Management Board

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE HALIFAX WORKSHOP
HELD ON JUNE 12, 2002 AT THE DELTA HALIFAX

1. INTRODUCTION

The Halifax workshop was attended by 21 stakeholders from a range of industry sectors and business associations, environmental NGOs, academic institutions and aboriginal organizations. This report is accompanied by a separate list of the organizations represented at the meeting.

2. VIEWS ON THE ANALYSIS (AMG)

Participants acknowledged the work of the Analysis and Modelling Group (AMG), had some questions of clarification on the details, and also raised concerns about assumptions used in the analysis, or noted areas that could have been considered in the modelling and analysis. Participants also noted some important implications of the analysis.

There were general concerns regarding the accuracies of the Business As Usual (BAU) assumptions, including the risk of an increase to the size of the gap and the fact that the BAU considerations included only current proposed projects, and did not account for future growth (e.g. new hydrocarbon projects in Nova Scotia).

One participant wondered whether the analysis identified that increased imports of electricity from the U.S. were a possible outcome. Another participant noted that in addition to the added costs for operations and/or emission permits; some industries (e.g. electricity generation) would also face added costs for capital due to the potential for lower credit ratings (e.g. on corporate bonds). It was suggested that some form of analysis of this phenomenon was warranted. It was also suggested that further discussions with Industry were needed to explore investment flows and specifically, their potential flow out of the country.

Other participants thought that the analysis was incomplete because it failed to account for costs that were part of the BAU scenario, including the impacts of inaction and the costs of climate change adaptation. There were also questions about the inclusion of health and industrial co-benefits, such as development of new technologies and new employment opportunities (e.g. employment opportunities in other sectors such as increased use of public transit and related business "spin offs"; and renewable energy production). One participant noted that the true cost of carbon dioxide (incorporating externalities) was probably much higher than the anticipated cost of emission permits – in other words, emission reductions will be cheaper than the global costs of adaptation considering the impacts on countries like Bangladesh and the Maldives.

There were also some comments on the overall financing mechanisms used to model the scenarios, and whether other mechanisms such as the GST should be modelled instead of personal taxes, or even the idea of reduced government expenditures as the mechanism to finance the system. Some stakeholders were concerned about the possible ranges of carbon prices modelled, and the associated uncertainties of the actual price, range of impacts, and competitiveness. Others were concerned that future analysis should not assume that Canada will be successful in obtaining credit for Clean Energy Exports (CEE).

The following views were also raised:

- There is a need for a better outreach mechanism to reach uninformed stakeholders, and industry associations could be used to survey members that would be affected, this could form part of further sector-specific analyses and consultations.
- There is a need for more concise background materials.
- There would be value in conducting some modeling of Option 2 Targeted Measures (TMs).
- The longer term perspective needs to be considered; past 2012.

3. VIEWS ON THE OVERALL APPROACH

There was general agreement that the policy goal of no region bearing an unreasonable burden was important, however there was no clear view on how this should be measured. Participants wondered about the use of GDP and what thresholds to use. One participant suggested that the Genuine Progress Indicator (GPI) could be more appropriate. Another participant suggested that burden should also be measured in terms of impacts and adaptation.

There were also comments on the need to consider the interrelatedness of different policy objectives, especially for TMs. It was noted that the policy options should be considered in the context of integrated goals and that the large burden on municipalities (e.g. transportation, urban planning) needed recognition. It was suggested that senior levels of government provide planning direction (guidance and support) on these issues.

Some participants noted that the Kyoto target reductions were very low, since the science indicates a need for much greater reductions in global emissions in order to stabilize the amount of CO_2 in the atmosphere.

The following views were also raised:

- There was concern about the risks that the price of carbon could exceed the expected range (e.g. due to speculation)
- There was concern about the way in which CDM/JI projects would be implemented. In particular that the emission credits be verifiable and that there be sufficient capacity in developing countries to sustain the emission reductions.
- It was felt that there is a need for a comparative examination of the Kyoto plans of other countries. A *government representative reviewed the current status of selected countries' Kyoto plans, noting that most countries have or are considering some form of DET, that TM approaches have a strong focus on technology innovation (fuel cells, photovoltaic, and nuclear), and some are choosing an international focus with CDM projects.*
- It was suggested that the Canadian plan develop a stronger emphasis on technological change.
- There was a view that consultations needed to be more inclusive and accessible.
- It was suggested that the North American context needs greater consideration.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Domestic Emissions Trading

Participants acknowledged the merits of a DET system, but noted the need to have the capacity and flexibility for future economic growth as an inherent part of the system. There was a cautionary note to make the DET process transparent and straightforward so firms (especially SMEs) understand it.

There was a comparative discussion on DET and the U.S. SO_2 trading system. It was noted that the SO_2 case was different from GHGs because firms had several options, including scrubbers or the option to switch to a lower sulphur coal. In the case of GHGs, coal-burning plants have no option but to buy permits or shut down. The problem is particularly acute in Nova Scotia because of large "stranded" investments in coal-burning electricity generation plants that have decades of useful life remaining. It was suggested that governments could ease the transition by providing accelerated capital cost depreciation.

In addition, some stakeholders were sceptical of the assumption that administrative costs of DET would be as low as in the U.S. SO_2 system. One participant noted that, although government costs might be reasonable, the administrative costs for a large number of small and medium sized enterprises (SMEs) could be substantial. *A government representative noted that at most it was expected that some 1500 facilities would be covered and an even smaller number of firms.*

The following views were also raised:

- There was support for the expanded use of offsets, to cover renewable energy and other sources of reductions in sectors not subject to DET. It was emphasized that offset reductions must be real and verifiable.
- A participant asked why emission permit auctions were not included in DET options 3 and 4.
- It was suggested that the allocation of permits under a gratis system would be difficult to administer.
- It was suggested that the scale back factor in the proposed allocation formula for option 4 is equivalent to a tax.
- Questions were raised about the integration of Credits for Early Action with a DET system, as well as the effect of regulated emission reductions on permits. *A government representative explained that the nature of the DET models being proposed meant that actions taken to obtain credits for early action and actions taken to comply with regulations would automatically help firms avoid the need for equivalent permits.*
- Other stakeholders asked about the impact of DET on the potential for Demand Side Management (DSM) programs. *The reply was that the resulting higher energy prices should provide an incentive for DSM.*

4.2 Targeted Measures

There was agreement among most stakeholders on the value of including TMs in the plan, with rich discussion surrounding a number of possibilities:

- Transportation: A number of stakeholders noted that there could be more aggressive uses of gasoline taxes, given that transportation accounts for a major amount of CO_2, and that the revenue could be invested in alternative transit. There was also interest expressed in inter-modal shifts from truck to rail, or marine. The concept of road pricing was identified as a strong TM, although the jurisdictional complexities associated with it were noted.
- Hydro development, and improved east west electricity transmission – stakeholders questioned governments' willingness to support measures in this category.
- Buildings TMs (fuel switching from light fuel oil to natural gas) – stakeholders noted that this was an opportunity that was new to Nova Scotia.

One participant pointed out that there are grim implications for some industries that need to be considered. For example, oil refineries are expected to invest in new technologies (capital costs), and deal with higher electricity prices (operating costs), and at the same time deal with decreased demand for their product (from transportation measures), and increased competition from imports. Together, these pressures are likely to make it difficult for some refineries to stay in business.

There was also some discussion on the appropriateness of support to ethanol since it would have to be imported into Nova Scotia.

4.3 Purchase of International Emission Permits

There was general preference for an emphasis on domestic action with regard to all options, with general concern about the transfer of funds outside of the country.

5. PREFERRED OPTIONS AND MIX OF INSTRUMENTS

Participants generally felt that there was insufficient information and too many uncertainties to determine the preferred mix of instruments. However, it was suggested by one participant that the preferred mix of policy instruments would rely first on reduced consumption, second on improved efficiencies, and lastly on adaptation to climate change impacts.

Participants suggested that less expensive TMs be implemented first (such as public education, consumption reduction, resource conservation) followed by more expensive TMs.

There was a comment expressed that overall, the reductions in business profit from the implementation of a DET/TM system are small, compared to what Canada should be paying as a nation, since the global impacts from climate change for some nations are very large.

One participant noted the need for a national plan, given the nature of the challenge. While there was general acceptance of this, it was also observed that the challenge would be to avoid a complex mix of federal and provincial measures that would, ultimately, be difficult for stakeholders to understand and implement.

The following views were also raised:

- There may be risks to Canada's position in the international community if we do not ratify and meet the Kyoto targets and therefore impact on other foreign policy issues.
- Kyoto is only a first step in reducing greenhouse gas emissions.

6. OTHER KEY MESSAGES

One participant noted that aboriginal rights and title to land needed to be considered in this plan, especially if tax systems are considered for TMs. At the same time, there are opportunities for governments and aboriginals to collaborate in developing wind energy, and forestry improvements etc. The program should be developed with timelines, and in association with municipal, provincial, national, and aboriginal governments.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – HALIFAX, JUNE 12, 2002

Quetta Inc.
Canadian Association of Petroleum Producers
Canadian Federation of Independent Business
Canadian Manufacturers and Exporters
Clean Nova Scotia
David C. Stewart & Associates Inc.
Ecology Action Centre
Emera Inc.
First Nations Environmental Network
Halifax Regional Municipality
Imperial Oil Limited
Kimberly-Clark Nova Scotia
Marathon Canada Ltd.
Nova Scotia Agriculture College
Nova Scotia Power Inc.
Renewable Energy Industry Association
Rowan Companies
Shell Canada
Transport 2000 Atlantic
Union of Nova Scotia Municipalities
World Trade and Convention Centre

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE YELLOWKNIFE WORKSHOP
HELD ON JUNE 13, 2002 AT THE EXPLORER HOTEL

1. INTRODUCTION

The Yellowknife workshop was attended by 18 participants from a range of industry sectors and business associations, environmental NGOs, and the Dene Nation. Emery Paquin, Director of Environmental Protection, Northwest Territories Resources, Wildlife, and Economic Development, opened the workshop on behalf of the Government of the Northwest Territories. Mr. Paquin noted that the Northwest Territories was already experiencing increased temperatures and associated climate impacts. He further noted that the Government of Northwest Territories views the Kyoto Protocol as the only globally coordinated plan to address climate change, and thus reiterated GNWT support for Government of Canada ratification of the Kyoto Protocol.

Jim Sparling, of Northwest Territories Resources, Wildlife and Economic Development, and Don MacDonald, of Alberta Environment, made presentations on the climate change strategies under consideration in their respective jurisdictions. Some participants raised concerns about the Alberta plan as it is not a national approach and is not designed to meet the Kyoto target.

In responding to the opening presentations, workshop participants called on federal, provincial and territorial governments to clarify their plans for public consultations, suggesting that broader and open public consultation was necessary, and needed to be accompanied by a more determined effort to solicit the views of the broad cross-section of Aboriginal Nations of the Northwest Territories. This report is accompanied by a separate list of the organizations represented at the meeting.

2. VIEWS ON THE ANALYSIS

Support was expressed for the general approach to the analysis. However, several concerns were raised regarding the assumptions and limitations of the models, including the omission from the analysis of:

- Related co-benefits, such as improved public health from better air quality;
- Increased employment in non-traditional industry sectors such as renewable energy; and
- The costs of climate change impacts on the Northern environment and economy.

The suggestion was made that a full cost accounting approach, involving indicators such as the General Progress Indicator (GPI), would be a useful complement to the existing analysis focusing on the GDP.

Several participants expressed limited confidence in the analytical results for the Northwest Territories and certain sectors of the economy.

2.1 Concerns about assumptions and results

Workshop participants raised a number of points concerning how the territorial-level results would change under different assumptions:

- Concern was expressed that the NWT economy would actually face significant negative impacts under the analysis conducted, but that the analysis suggests overall positive GDP growth through the assumption of revenue recycling through the personal income tax system.
- Questions concerning the accuracy of NWT emissions projections were raised on several occasions. Participants were particularly concerned that the analysis did not include the potential for MacKenzie Valley gas project activity prior to 2012, and did not adequately capture the extent of activity underway and planned in the emerging diamond-mining sector.
- There were questions on the assumptions regarding renewable energy growth in NWT, and a view expressed that wind power and biomass would not proceed without financial support.

It was also noted that the analysis provided limited information on the burden that increased electricity energy prices would place on individuals and low income households as well as economic activity and investment in the Northwest Territories, given that NWT residents and businesses already experience some of the highest prices in Canada. An apparent inconsistency between electricity and diesel price impacts was also noted.

Questions about how the assumptions affected the broader national analysis included:

- whether the assumption that the first commitment period target (minus 6 percent) is valid post-2012, given the expectation of international negotiations on a second commitment period, which are expected to begin in 2005;
- the level of confidence in the "Kyoto gap" estimate of 240 million tonnes of reductions that Canada has to meet. In particular, concern was expressed about the continuing and significant growth in the projected gap, and whether current projections have yet managed to accurately reflect the higher than expected economic growth currently taking place in NWT and Canada as a whole.

2.2 Suggestions for Further Analytical Work

Workshop participants made a number of suggestions for further analytical work by the federal/provincial/territorial Analysis and Modeling Group, including:

- More detailed analysis of impacts on the NWT and communities, taking into account the actual energy and electricity cost increases experienced in the North. It was felt this would contribute to decision-making at the Territorial level.
- Inclusion of co-benefits and analysis of the costs of climate impacts under various scenarios.
- Scenarios with different assumptions on greenhouse gas reduction targets following 2012;.
  - More detailed cost analysis of a targeted measures approach, as in Option 2.
  - A scenario that placed priority on domestic actions.
  - Alternative revenue recycling approaches, incorporating both corporate and personal income taxes.
  - Further sensitivity analysis of key assumptions.

3. VIEWS ON THE OVERALL APPROACH OF THE FEDERAL DISCUSSION PAPER

A number of participants expressed support for a policy approach that considers the long-term nature of the climate change issue. The view was also expressed that the approach needs to reflect the timelines for capital stock turnover in Canadian industry. In building a longer-term approach, participants called on governments to more fully recognize the important role that individuals, households and communities play in contributing to the climate change problem, and the potential role they could play in any mitigation solutions. Related to this, some participants felt that the discussion paper favored approaches attempting to manage the status quo in terms of energy use, and did not sufficiently address overall demand management and energy use. As a result, participants called for more and broader targeted measures that involve individuals / households / communities, along with the already identified industrial sectors. Participants recognized that significant efforts in public education and outreach would be required to realize this potential. Moreover, some participants expressed the view that such a longer-term, demand-management approach should place a preference on domestic over international actions, ensuring that any co-benefits are captured in Canada, while also positioning the nation well for future commitment periods. A concern was also raised that the time frame for a decision on ratification of the Kyoto Protocol is too short.

In reflecting on the policy objectives set out in the discussion paper, participants suggested that the paper would be improved if the policy options were assessed in terms of how well they satisfy the various policy objectives.

Participants suggested the following improvements to the objectives:

- Recognition of the need to position Canada to address climate change in the longer term, not just the first Kyoto commitment period,
- A clear preference for demand management approaches, and
- The precautionary principle be included as a policy objective.

Some participants also suggested that the design of policy options more fully satisfy the "polluter pays" policy objective.

A number of interventions were made on Canada's proposal for credit for cleaner energy exports, including:

- Concerns raised that cleaner energy exports would not reduce overall emissions and would add to growth of energy use,
- A concern that pursuit of cleaner energy credit tarnishes canada's international reputation, and has the potential to undermine the environmental integrity of the kyoto protocol, and
- Concerns that the proposal does not adequately consider the range of impacts (habitat disruption, human and ecosystem health effects, accidents and emergencies, etc.) Associated with the exploration, production and transport of natural gas.

3.1 Additional Points On The Federal Discussion Paper

Throughout the day participants expressed unfamiliarity with a number of the terms used in the federal discussion paper and drew attention to the complexity of the climate change issue and the policy instruments intended to address it. Participants called on governments to increase public education activities, paying particular attention to how climate change and the related policy approaches can be communicated clearly to northern and aboriginal communities. As well, it was suggested that the public needs to have more information on how the various policy options would impact energy prices, to allow informed input to Canada's decision on ratification of the Kyoto Protocol.

Divergent opinions were expressed on the need to ratify the Kyoto Protocol first before a detailed plan is place - thus providing industry and consumers with the appropriate signals, versus the need for Canadians and Canadian industry to have significantly more time and information before making an informed decision on ratification. Concerns were expressed regarding uncertainties in the emission projections and related analysis. Participants suggested that clearer options for managing risk should be addressed in the discussion paper.

Other views expressed addressed:

- The need for Canada, as a wealthy and developed nation, to demonstrate leadership on the climate change issue and continue to work within the framework provided for under international negotiations.
- Recognition of the substantial financial and technical capacities that will be required to address climate change, as well as the limited availability of those resources in the NWT.
- The manner in which Option 4 incorporates a "scale back factor" that places burden even on facilities designed to best available technology standards

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Domestic Emissions Trading (DET)

Stakeholders expressed concerns about and requested additional information on the administrative and transactions costs and structures of designing, implementing and enforcing a domestic emissions trading system, and how these costs would be shared between administrators and industry. The need for third party verification was raised as very important to ensuring transparency and environmental outcomes. On a related note, some skepticism was expressed concerning the ability and willingness of federal and provincial/territorial governments to enforce compliance with a DET system. Workshop participants considered emissions trading a complex tool and expressed a need for further information and strategies that could be used to explain the concept to Northern communities and individuals.

Additional comments on domestic emission trading included:

- The value of an early signal on whether DET would be used in Canada was emphasized, as this would provide industry with policy certainty and encourage early participation.
- The need to introduce emission monitoring and reporting requirements as a first step
- Requests for additional information on the effectiveness of emissions trading in other

jurisdictions - beyond the U.S. Acid Rain Program. In particular, concern was raised that some of the design elements under Option 3 and 4 have not been demonstrated to be effective in other jurisdictions.

- Requests for clarification regarding which sectors and activities would be eligible for offsets under Option 4. Including protected areas as eligible offsets was suggested. A desire to encourage offsets that respect biodiversity and not encourage plantation-type land use was also expressed.
- Acknowledgement that not all emission trading options would be consistent with the polluter pays principle.
- Concern that the ownership of sinks / emission credits is uncertain, particularly related to Aboriginal lands.
- Noting of the benefits of emissions trading approaches, including its cost-effectiveness and the flexibility it provides for industry to choose the most appropriate options to meet targets.

4.2 Targeted Measures

Broad support was expressed for approaches that favored targeted measures, particularly those that were designed by and for the North. Therefore, it was suggested that the design and implementation of targeted measures should take place at the territorial / provincial level, but that financial and technical resources would need to be made available from the federal government. Participants called for energy related measures and noted the need to address existing barriers (financial, technical and program design) that could get remote communities off diesel by providing incentives for communities and utilities to invest in district energy and renewable energy sources. This was summarized as a need to develop holistic, community wide approaches to energy use in the North. As well, given the age of and investment in existing buildings and infrastructure, participants called for additional measures that targeted existing infrastructure, in addition to those proposed for new investment.

Concern was stated over the limited attention to measures targeting individuals, households and communities. The Green Municipal Fund was held up as an example of an effectively designed program, and the Federation of Canadian Municipalities (FCM) was commended for the leadership and support it has provided to Northern communities. Participants noted the importance of public education in motivating behavioral change and society-level technological innovation on relatively short time scales. Examples such as reductions in smoking and drinking/driving rates, increases in "blue box" recycling and the uptake of personal computers and internet communication technologies were offered. Participants also noted the heavy price that has been paid when innovation and change were not embraced, and the long-term cost of approaches that attempt to reinforce the status quo.

Participants suggested that additional and focused attention needed to be paid to transportation emissions at the national level. In particular, concern was expressed over the limited measures proposed for reducing road transport and air transport emissions. Support was expressed for incentives and measures that could increase rail transport of people and goods.

A number of additional comments were raised in relation to targeted measures, including:

- Concern that the projected 104 MT for targeted measures would be difficult to achieve, especially given the lack of analysis associated with changing consumer behavior.
- The need for broader public education to inform consumers about the challenges of climate change and explaining the energy price increases they might face.
- Caution was urged in counting on measures that would require consumers to embrace unproven technologies. This led to a call for additional support for research and development, focusing especially on encouraging innovations for - and adapting existing technologies to - the northern environment.
- Some participants said that the targeted measures outlined in the GNWT Greenhouse Gas Strategy would not get NWT anywhere near a Kyoto-type target. This led to calls for an acknowledgement that GNWT will have to make tough choices and that it could not continue to target increased oil and gas activity while also addressing climate change at the same time.
- It was noted that industry has ideas that could reduce emissions, but does not have access to the appropriate incentives. For instance, residual heat from power production in isolated communities cannot be undertaken under existing rate structures. Others noted that regulations provide excellent signals and that ratification of Kyoto would provide industry with the best incentive for undertaking appropriate action.
- The potential for significant emission reductions from building retrofits was also noted.
- Concern was raised regarding the reduction of oil and gas related funding under the Program on Energy Research and Development (PERD) in recent years, and that this sends the wrong signals to the industry.

4.3 Purchase of International Permits

Most participants expressed support for an emphasis on domestic action, in preference to purchases of international permits.

5. RISKS INVOLVED IN RATIFYING OR NOT RATIFYING THE KYOTO PROTOCOL

5.1 Risks of Not Ratifying the Kyoto Protocol

Several participants acknowledged that failure to act now would result in more limited choices and a more significant problem for future generations. A call was also made for recognition that impacts and costs were already being experienced and climate change mitigation now would be substantially cheaper than climate change adaptation later. The view was also expressed that ratifying the Kyoto Protocol now would send industry, Canadians and the international community the right signal to initiate needed action.

Some participants expressed the view that failure to ratify the Kyoto Protocol would result in damage to Canada's international reputation and would undermine the need for international cooperation on a number of issues of importance to Canada, not just climate change. Moreover, it was thought that the international climate change process might unravel altogether should Canada fail to ratify the Protocol. Finally, it was argued that by not ratifying the Kyoto Protocol Canada would be validating the U.S. and Alberta approaches to climate change.

5.2 Risks of Ratifying the Kyoto Protocol

Several concerns were raised regarding the risks associated with Canada ratifying the Kyoto Protocol, especially in the absence of ratification by Canada's largest trading partner, the U.S. It was suggested that the approach proposed under the options presented in the discussion paper focused too narrowly on short-term domestic measures and did not adequately consider the need for long-term, global and cost effective solutions. Caution was also urged over the risk that the price of emission reduction credits may be significantly underestimated. Concerns were reiterated regarding uncertainties in the projected "Kyoto gap" estimates. The need to develop and communicate appropriate contingency, liability and other risk management strategies was emphasized. Finally, a call was made to consider the fragile nature of territorial economies and the potential that oil and gas related activities could play in addressing poverty – an equally pressing sustainable development consideration in the Northern context.

In summarizing the discussion on the risks of ratification, it was noted that there are a number of factors involved and that climate change is a complex issue. As such, Canadians need more information and time to develop a broader understanding of the issue, position it in the context of their local jurisdictions, and assess the strengths and limitations of the various policy approaches under consideration.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – YELLOWKNIFE, JUNE 13, 2002

Arctic Energy Alliance
BHP Billiton Diamonds
Canadian Arctic Resources Committee
Canadian Association of Petroleum Producers
Canadian Energy Pipeline Association
Canadian Parks and Wilderness Society
Climate Action Network
Dene Nation
Diamond Mines
Ecology North
Enbridge
Mackenzie Valley
NWT Chamber of Mines
NWT Power Corporation
World Wildlife Federation

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE CHARLOTTETOWN WORKSHOP
HELD ON JUNE 14, 2002 AT THE HOLIDAY INN EXPRESS

1. INTRODUCTION

The Charlottetown workshop was attended by 7 stakeholders representing environmental groups, the private sector and the Federation of PEI Municipalities. This report is accompanied by a separate list of the organizations represented at this meeting. Opening remarks were given by Mr. Chester Gillan, PEI Minister of Fisheries, Aquaculture and Environment. The one-day workshop focused primarily on policy issues (e.g. Canada's approach to climate change) and on targeted measures as they apply in the PEI context.

2. VIEWS ON THE ANALYSIS

Participants raised the following concerns about the Analysis and Modeling Group (AMG) work:

- *Reliance on a limited economic indicator -- Gross Domestic Product (GDP)*: It was suggested that a broader indicator such as the Genuine Progress Indicator (GPI) would provide a better assessment of impacts, especially given that the issue at hand has an environmental focus. *AMG representatives expressed interest in broadening the analysis to include GPI impacts, but noted potential constraints in terms of the information needed to model such complex indicators.*
- Lack of consideration for co-benefits of climate change actions (e.g. clean air, increased technology uptake resulting from higher energy prices): AMG representatives indicated that the AMG had carried out a co-benefit analysis in previous assessment, but had not done so in the current round. AMG added that the modelers had, however, built some technology change considerations into the analysis.
- Lack of consideration of costs of not ratifying: This concern had a number of dimensions. A question was raised about the fairness of not ratifying Kyoto for vulnerable provinces such as PEI, where a change in sea level would have a significant impact. The panel indicated that the long-term costs of adaptation are not well understood and are very difficult to model. This makes it challenging to factor in assumptions about avoided impacts. Nonetheless, it was agreed that there was value in continuing to build on existing work to cost out impacts and adaptations, including the greater impacts that will likely result if climate change is not addressed. The impact on competitiveness of not ratifying was also raised as an issue and the point was made that there may be a lot of spending on new technologies as a result of ratification of the Kyoto Protocol, although it is not clear that the new technologies would necessarily be produced in Canada.

Clarification was also requested on which sectors are included under "Other" in the emission reduction analysis for PEI, and why this category accounts for a significant portion of potential reductions. *AMG responded that this likely stemmed from landfill gas and waste management, both sectors included in "Other".*

3. VIEWS ON THE OVERALL APPROACH

During the course of discussions, participants presented the following views on the federal government's approach to climate change:

- The federal government's approach to any sector should involve the removal of barriers (or disincentives) to positive action, the provision of incentives, and the use of complementary social marketing and education tools.
- Some participants raised concern about the ethical basis and fairness of Clean Energy Exports (CEE), indicating that it appeared to be an "11th hour" change in the rules; and one that other countries would want to take advantage of, to the detriment of the integrity of the Kyoto process. It was further noted that Canada's position is damaging to its international reputation.
- It was also noted that Canada is a "minority of one" in arguing for CEE, raising the question of whether the assumed 70 Mt reduction was a reasonable assumption. Participants indicated that the AMG should consider policy scenarios with and without CEE, and carry out a sensitivity analysis on this basis.
- In addressing the possible benefits of increased fuel prices, one participant noted that the current low energy price may be acting (and may continue to act) as a disincentive to the adoption of clean energy technologies (e.g. solar photovoltaic).
- A general concern was raised by some participants about the delay in Canada's decision to ratify Kyoto. It was stated that government should simply agree that the objectives of Kyoto are good and necessary, and then "get on with it". *It was indicated that Kyoto is different from other international treaties in that it is a binding agreement with legal penalties for non-compliance. Partly because of this, and given Canada's constitutional make-up and commitment to "due diligence", extensive consultation is necessary to ensure that it will be feasible to meet our commitments before a final decision is made.*
- Participants questioned whether there was an adequate definition of "green" to apply in determining whether "hot air" credits were acceptable in international emission trades.
- Concerns were raised about whether or not companies taking early action (e.g. to improve efficiency or to switch to cleaner fuels) would get credit in an eventual national strategy. *It was noted that it is not possible to make such a determination until it is known what the policy context is going to be.*
- There was some concern expressed over competitiveness impacts that may arise with increased energy prices; with the specific example of the price of PEI potatoes versus an Ohio product if the former has to pay higher fuel costs. *It was noted that, according to AMG's model, the competitiveness impacts in the agricultural sector would be minor. However, the impacts may be felt more on the food processing side. In addition, the point can be generalized to a need to be sensitive to impacts in sectors with very small profit margins.*

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

Participants were asked to provide their views on the six policy objectives that guide the federal government's development of a workable plan.[1] Although participants did not identify specific

[1] These are: 1) achieving our goal under the Kyoto Protocol, with the majority at home 2) remaining competitive while moving to a less carbon-intensive economy 3) regional equity in benefits and burdens

priority objectives, there was general agreement that the six objectives must be well-balanced to make the plan "politically sale-able". The remainder of the discussion focused primarily on the Targeted Measures, and touched only briefly on considerations related to DET and International Emission Permits.

4.1 Domestic Emissions Trading (DET)

Participants did not have strong views on the design of a DET, but requested clarification on "who would manage the system" and "what the system would look like". *Federal representatives indicated that a priority would be placed on fungibility of credits (i.e. ability to trade verified credits across jurisdictions), and that the government would not want to create a balkanized system. It was noted that under a large final emitter DET system such as that envisaged under Options 3 and 4, it is possible that no PEI firms would be covered (depending on the criteria used to define "large"). The interest of PEI firms would therefore, in all likelihood, be on the creation of emission reduction offsets in the uncovered sectors.*

4.2 Targeted Measures (TM)

Participants engaged in an extensive discussion of the targeted measures, as they apply in the PEI context. Sector-specific comments are summarized below.

Buildings

It was suggested that the PEI government would be a good vehicle, or coordinator, for local delivery of federal buildings programs. The province's small size may also make it an ideal location for pilot projects. Participants noted that building owners make investment decisions on the basis of economic rather than environmental factors. There was general agreement that adequate, performance-based incentives should therefore be offered for building energy retrofits. There was strong support among participants for social marketing strategies to increase awareness and to encourage action on energy efficiency, both in the residential and commercial buildings sector. There was also an identified need to work with building contractors who can help educate residential homeowners on the life cycle cost benefits of energy efficient new home design and existing home retrofits.

Electricity

Discussion on this sector focused on electricity purchases from other jurisdictions and on an increased use of wind power to satisfy the Island's energy needs:

- Participants expressed support for improved (and less expensive) access to the Quebec grid; for example, via reduced wheeling charges. PEI is currently not able to match the price offered for Hydro Quebec's electricity in the United States (U.S. states offer roughly 10 to 20 percent more than PEI is able to pay).
- There was general agreement that wind energy production should be further increased in PEI, either through new installations or by building on existing infrastructure. Thus, there was strong support for initiatives (targeted measures and/or DET) that would serve

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4) ensuring cost effectiveness 5) applying the "polluter-pays" principle and 6) ensuring consistency with other national policy goals.

to increase PEI's supply. Popular support for wind appears to be strong, as evidenced by the sale of green electricity from the Island's North Cape wind farm. On its completion, blocks of green electricity were offered to consumers at a premium. The program is now fully subscribed, indicating that PEI residents are willing to pay a green power premium, and that the market is probably not yet saturated. It was suggested, however, that consumers should not have to pay a penalty for "doing the right thing", and that financial incentives should work to counterbalance such disincentives. It was noted that, at a price of $50 per tonne of carbon (under a DET system), wind power looks even more attractive from an economic perspective. Offset credits for wind power were favoured by some. Participants noted that several companies have already inquired about the possibility of purchasing emission reduction credits from the North Cape wind farm.

Industry

Participants expressed support for industry measures that may help PEI's small and medium-sized enterprises (SMEs). One participant described a Quebec program that provided low-cost environmental audits to SMEs, identifying areas where the company could save energy in electricity use, waste management and water. However, an assessment of this program's feasibility in PEI revealed that local SMEs were unwilling or unable to cover the upfront costs (approximately $2,500). There was support from the workshop participants for measures to help cover these costs and assist with financing of follow-up actions. Participants added that social marketing is a key success factor. The importance of incentives to stimulate interest in such work was noted (e.g., free pre-assessments that make the case for opportunities with good potential payback).

Municipal

Participants had the following views on the municipal sector measures:

- Participants strongly encouraged the "urban planning support" measure. This measure would be very useful for PEI, particularly in the smaller municipalities that do not have the resources to plan energy efficient, low-emission communities.
- It was also noted that a large percentage of the population is in rural areas, and that planning assistance is important in this context as well (i.e. it should not be assumed that measures will "automatically" address rural areas).
- Landfill gas is not currently an issue in PEI, as the existing sites are considered to be too small to make capture and utilization projects worthwhile. The two landfill gas measures described in the discussion paper are therefore of little interest.

As a general point, it was suggested that because of the small size of municipalities in the province, it would probably make sense to partner with the provincial government for municipal initiatives.

Transportation

Prior to discussion of transportation measures, three considerations were noted: a) transportation emissions account for approximately 40 percent of the province's GHG emissions; b) PEI relies entirely on trucking for the transport of goods (no rail lines exist) and; c) there is no public transit

on the Island. It was also noted that it would be difficult for PEI to take certain measures that affect price in isolation from other provinces in the region (for example, tying vehicle registration costs to efficiency or weight could drive commercial transport vehicle registration to other jurisdictions). Thus, a regional action plan is needed. With these issues in mind, participants expressed the following views on the transportation measures:

- There was general support for measures that may provide a "shot in the arm" for public transit.
- Participants expressed support for initiatives to expand ethanol production and support research into ethanol from cereal crops. The province is currently looking into the possibility of a large-scale ethanol production plant. The province may be able to test output of a demonstration plant using school buses and the provincial government fleet as test vehicles.
- There was support for "tilting" vehicle purchase decisions by giving tax breaks to low emission vehicles (e.g. hybrids and E-85 vehicles) and by imposing increased taxes on fuel guzzlers, noting that disincentives should go hand-in-hand with incentives.
- Transportation measures should address emissions from all transportation modes, including boating. It was also noted that two-stroke engines (lawnmowers, chainsaws, leaf blowers etc.) are very inefficient and emissions from these sources need to be addressed.

Agriculture and Forestry

Participants noted the need for measures aimed at improved management of private woodlots, riparian zones, shelterbelts, hedgerows and buffer zones. Similar support was expressed for a nutrient management measure to provide education on when and how to apply fertilizers. The need for nutrient management plans for individual farms was suggested.

4.3 Purchase of International Emission Permits

Participants indicated some concern that Canada may lose the co-benefits of climate change actions (e.g clean air, technology advancement) by purchasing significant emission reduction credits from other countries. There was general support for linking the purchase of international credits to other international development policy objectives (e.g. those of the Canadian International Development Agency – CIDA).

5. GENERAL THEMES

During the course of discussion, four general "themes" emerged:

- PEI is particularly vulnerable to climate change impacts, particularly with regards to sea level rises.
- The government should not only look at the cost of Kyoto, but also the benefits.
- It is important to assess targeted GHG reduction measures as they relate to other government policy objectives.
- PEI may be an ideal location for pilot projects in any of the targeted sectors.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – CHARLOTTETOWN
JUNE 14, 2002

Bedeque Bay Environmental Management Association
Climate Change Caravan Environmental Coalition of Prince Edward Island
PEI Energy Systems
Maritime Electric
Federation of PEI Municipalities
Environmental Coalition of Prince Edward Island

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE CALGARY WORKSHOP
HELD ON JUNE 14, 2002 AT THE DELTA BOW VALLEY HOTEL

1. INTRODUCTION

The Calgary workshop was attended by 58 stakeholders from a range of industry sectors and business associations, environmental NGOs, academic institutions and aboriginal organizations. This report is accompanied by a separate list of the organizations represented at the meeting.

2. VIEWS ON THE ANALYSIS (AMG)

Participants acknowledged the work of the Analysis and Modelling Group (AMG), but had questions of clarification on the details. Concerns were raised about assumptions used in the analysis, and additional areas that could have been considered in the modelling analysis were noted. Participants also noted some important implications of the analysis.

There were a number of questions raised about the level of confidence in the results which led to a general agreement that the analysis should be viewed as indicative and directional rather than as being determinant of what would happen under the different policy scenarios.

A number of participants were concerned that the analysis failed to capture the implications of the cases on access to international capital and loss of investment in Canada arising from the potential for reduced credit ratings associated with increased production costs and increased risk. There was also a widely held view that macro-economic modelling, while it may be useful to provide general overview of impacts, did not provide enough information about the impacts on specific provinces, specific industries and specific plants, and that it underestimated the costs of meeting the Kyoto target. Some participants went further and questioned the validity of the results for several sectors, noting that the results were not consistent with other studies undertaken by those industries. In particular, it was suggested that the models were incapable of reproducing the "go - no go" aspects of investment decisions for large projects and frontier developments (i.e. the models are based on gradual responses as opposed to step functions). There was a strong recommendation for further consultations with industry sectors on assumptions and modeling results, and for more detailed analysis of sector impacts.

On the other hand, some participants noted that the analysis might overestimate the impacts and costs. A few participants indicated that the analysis was unlikely to account for the potential gains from new technologies and innovation, in particular breakthrough technologies. They also noted that the analysis did not take account of health co-benefits or the costs of natural disasters such as drought. It was also noted that in the past, costs of compliance with new environmental requirements have often been less than anticipated.

The appropriateness of the Business as Usual (BAU) base case, which was used for comparison purposes, was questioned. In particular, it was noted that the coming into force of Kyoto (which is likely but not included in the base case) would create an unfavourable business environment for Canadian exports in certain countries, should Canada fail to ratify. Others noted that a BAU scenario would also mean significant costs for impacts and adaptation, as well as lost business opportunities and health and environmental co-benefits.

There was a strong view from many participants that the implications for Alberta industries reflected an unreasonable burden. There was also a view that additional analysis was needed to explore the impacts and burden on rural, remote and aboriginal communities.

A few participants indicated the need to extend the analysis of impacts beyond 2012. This included some questions about the appropriateness of assumptions beyond 2012 (e.g. holding the -6% target constant) and the implications for provinces, sectors and households.

3. VIEWS ON THE OVERALL APPROACH

Discussion of the overall approach followed presentations on the Federal Discussion Paper and the Alberta Plan. There was general agreement from most participants that there was a need to act on climate change, however there was strong disagreement on whether or not to do so in the context of the Kyoto Protocol.

Given their view that the proposed options impose an unreasonable burden on Alberta industries, several participants indicated a desire for more information on how the federal government might address these impacts in its Plan. Transitional measures for capital stock replacement and selected Targeted Measures (TMs) were mentioned as possible ways of dealing with the burden.

There were strongly opposing views on the Federal Approach and Kyoto ratification:

- Some participants supported ratification now as a first step towards more aggressive reductions in the second commitment period
- Some supported meeting the Kyoto target but had concerns about outflow of capital and technology associated with international permit purchases that might be required to meet the target
- Others viewed action by 2012 as impractical and supported working to a longer timeframe (e.g. 2020) to allow for a more realistic approach to capital stock turnover.

Views on the Alberta Plan were similarly mixed:

- Some participants viewed the Plan as a more practical and achievable alternative that addresses the problem of climate change while recognizing the need for the Canadian economy to adjust over time, as opposed to the "artificial" and imposed requirements of the Kyoto Protocol
- Others viewed the Alberta Plan as a "non-starter" and suggested that Alberta has both the responsibility (as one of the largest emitters) and the means (as one of the richest provinces) to make reductions. These participants also felt the Plan places too much emphasis on voluntary measures, and would result in an overall increase in emissions.

There was also a view that the Federal options and the Alberta Plan had several elements in common and that it would be worthwhile to move ahead now on these areas of agreement (e.g. energy efficiency, new technology development, conservation). There was some support for the view that any approach should focus on support for R+D, incentives for renewable energy, and measure to ultimately help change consumer behaviour.

There was also a strong preference from most participants for an approach based primarily on domestic action, although for different reasons. Most were concerned about keeping investment capital and co-benefits in Canada. Others were concerned that Canada get started on longer term changes to energy use patterns.

It was suggested by some that Canada's plan needs to be designed in the context of an integrated North American market and that it should be compatible with the U.S. approach. A different view was that there are broader business opportunities beyond the U.S., for example in Europe and developing countries, that might be at risk should Canada fail to ratify Kyoto.

Specific comments were made that:

- it was unclear why Option 4 would be less costly that the others
- the Alberta Plan inappropriately shifts responsibility for upstream emissions to others
- there are still some scientists who disagree with the Intergovernmental Panel on Climate Change (IPCC) perspective on climate science
- the elimination of existing subsidies for fossil fuels, and oil sands in particular, was a necessary contribution to the solution, countered by a view that the industry pays substantial royalties
- Canada consider making use of the Kyoto Protocol's penalty clause by working to a longer-time frame to meet the 6% reduction target
- the uncertainty of obtaining credit for cleaner energy exports needs to be taken into account.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

The discussion on policy instruments took place in an integrated context, dealing with both the federal Discussion Paper and the Alberta Plan.

4.1 Targeted Measures

A view was expressed that no combination of targeted measures (TMs) could reasonably provide the level of reductions being sought from the electricity sector, which added up to a large percentage of existing emissions. It was felt that this sector was being asked to bear an unreasonable burden, particularly since most of the emission reductions would come from thermal plants in Alberta and a few other jurisdictions.

There was a general view that in developing TMs, governments should concentrate on setting the targets and/or the framework for reductions, and then providing appropriate incentives, leaving the choice of actions to industry. Many participants supported the use of covenants provided they included specific targets. A number of participants also agreed that there should be a regulatory backstop for such covenants. The example of the Clean Air Strategic Alliance and in particular its work on flaring was offered as an effective framework for action, although some cautioned that the timeframe required to negotiate and implement might not allow for a similar process in the case of needed GHG reductions.

The idea of specifying the use of Best Available Commercial Technology (BACT) was suggested, however, there was also a concern about who would be responsible to make the

determination (i.e. a time consuming process for governments) and how it would be set (e.g., expensive technology used in few plants). There was also a view that the strengthening of automobile and truck fuel economy (CAFE) standards in line with actions in some U.S. states would be an effective measure.

There were several suggestions for fiscal measures, including tax measures to improve the treatment of depreciation and deductibility rules. It was suggested that:

- Class 43.1 CCA should be eligible for flow through to investors
- Class 27 CCA, which was eliminated in 1999, could be used to support renewable energy investments.
- Renewable energy investments should be afforded a CCA rate of 100%
- Transit and rail travel should be tax-deductible
- The adoption of desirable technologies could be fostered by the application of a revenue-neutral fee-bate based on performance.

There were opposing views on whether or not current tax treatment provided a level playing field (e.g. renewable energy vs. oil sands or rail vs. trucking). One participant noted that the federal government already had several incentives in place that should be followed by the provinces (e.g. CRCE, MDIP, etc.). There was a widely held view that some form of transition measures would be needed to help compensate industry in various sectors for stranded capital assets.

It was suggested that provision of public performance information is important and that incentives, and possibly regulations, should support measurement and audit of GHG emissions.

It was suggested that technology could be supported either through grants for pilot testing or through incentives for customers. It was also noted that the U.S. practice of making payments only upon installation of the technology was a useful approach.

It was noted that the total bill for all the proposed tax incentives and grants could be substantial and that this would have consequences for the government's fiscal balances. Another participant suggested that existing funding programs (e.g. infrastructure program) be redirected to support GHG emission reductions.

Support was extended for TMs measures at the municipal level including public transport, community energy efficiency and community design, with an emphasis on citizen involvement.

4.2 Domestic Emissions Trading (DET)

A view was expressed that all of the DET options go well beyond what is achievable by industry, and that to some extent all options represent a tax that cannot be passed on to customers in international markets. In particular, the concern was expressed that DET would result in industry bearing the costs of purchasing international permits. The view was also expressed that DET would transfer the liability for reductions to price-taking industrial sectors. The possible role of a price cap in mitigating industry costs was noted.

Participants emphasized the need to focus first on setting reasonable and achievable targets for industry on a sector-by-sector basis, rather than on the mechanics of DET design.

Views on options for the design of DET included:

- Option 1 (Broad as Practical) was preferred by some as supporting the polluter pay principle, but opposed by others as a carbon tax.
- There was some convergence of industry view that an approach based on efficiency and emissions intensity might be workable (based on Option 4). However, there were also questions on how emission factors would be set and concern that the scale-back factor in Option 4 is simply a tax.
- There were differing views on the desirability of offsets, and recognition that, should they be used, the credits should accrue to landowners in the agriculture and forest sectors and to aboriginal communities
- The importance of allocating allowances or credits to non-emitting electricity generation was noted.
- A concern was expressed that the transportation sector - and drivers in particular - get off too lightly.
- The importance of getting right the detailed treatment of chemical sector cogeneration in the design of different options so as to make it viable to industry was raised.

A range of views were expressed on implementation, from an emphasis on the need to implement a mandatory system no later than 2005, to a view that a transition strategy is required to allow government and industry to learn together about liabilities before final rule making is established for a DET. Most suggested the need for more work and more consultation on specific design elements before any decision.

4.3 Purchase of International Emission Permits

There was general opposition to international purchases and a preference for investing instead in technology and innovation in Canada. Concerns were expressed about:

- international transfers of wealth,
- purchases of "hot air" that will not result in overall emission reductions, and
- inefficiency and unreliability in the Russian energy industry which is a target for purchases.

The view was also expressed that if Canada takes the approach of setting an achievable stretch target domestically, extending the timetable for reductions if necessary, then there is very little if any need for international trading. However, it was also recognized that international emission trading has a more central role in the Kyoto context.

Participants noted that investments in developing countries through the Clean Development Mechanism (CDM) may offer opportunities where projects are economically viable, but expressed concerns about:

- transactions costs and the complexity of the CDM, and
- ownership of credits.

5. MIX OF INSTRUMENTS

There were strongly diverging views on the mix of instruments.

Participants who supported Kyoto ratification tended to support a combination of DET and TMs but rejected the use of credits for Cleaner Energy Exports. A variant of Option 3 was suggested with the use of offsets and TMs to address sectoral and regional burden.

Those participants who opposed Kyoto ratification suggested that equivalent standards be adopted that allow for economic growth.

There was also a reminder that the appropriate mix should contain transition measures to the social and economic alleviate burden on rural, remote and aboriginal communities.

6. RISKS OF RATIFICATION AND NON-RATIFICATION

There was a view expressed that the risks of ratification were being overemphasized, and that given the current support of the Canadian public, there would be little political risk in ratification. It was also suggested that ratification should proceed now, and that adjustments to policies could be made along the way. There was also a view that not ratifying Kyoto would affect Canada's international reputation, and would mean a loss of business opportunities. More importantly, it was felt that there were significant environmental risks, to Canada and to vulnerable nations in the developing world. Another view was that Kyoto was flawed but that an international framework had to be in place to move forward, and that ratification was essential for business to access the CDM/JI mechanisms and pursue new markets for new Canadian technologies.

A number of participants felt that the risks of ratification for industry and the Canadian economy were too high. Participants noted the risks associated with the "Kyoto gap", and with other assumptions. There was also a suggestion that public support for Kyoto is based on a lack of understanding of the impacts and that the public is not prepared to pay the cost. The view was also expressed that more analysis is needed to improve understanding and confidence before a decision is taken.

There was also a view that another risk was the strain on federal-provincial relations. Federal and provincial governments were urged to find common ground.

There was a general view that regardless of the approach, climate impacts would occur, and that there was a need to work on adaptation measures.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS - CALGARY, JUNE 14, 2002

Arthur Patterson
Agrium Inc.
Alberta Chamber of Resources
Alberta Forest Products
Alberta Motor Association
Alberta Treaty Health Authority
Alberta Woodlot Association
ATCO Gas
ATCO Power
Beaver Drilling
Benign Energy Canada Inc.
Calpine Canada
Canadian Association of Petroleum Producers
Canadian Clean Power Coalition
Canadian Energy Pipeline Association
Canadian Manufacturers & Exporters
Canadian Natural Resources Limited
Canadian Nuclear Association
Canadian Pacific Railway
Canadian Petroleum Institute
CERI
City of Calgary
City of Edmonton
Climate Action Network
Climate Change Central
Coal Association of Canada
Confederacy of Treaty Six First Nations
David Suzuki Foundation
Dow Chemical
EnCana Corporation
Environmental Services Association of Alberta
EPCOR
Fording Coal
FIRSST Incorporated Investment Banking
GEMCo
Green Alternatives Institute of Alberta
Lafarge Canada Inc
Landstewardship Centre of Canada
Mariah Energy
McLeod Institute
Metis Settlements General Council
Northern Cross
Nova Chemicals
Pembina Institute for Appropriate Development
Petro-Canada

Petroleum Services Association of Canada
Petroleum Technology Alliance Canada
Prairie Acid Rain Coalition
Public Education and Outreach Hub of Alberta
Suncor Energy Inc
Sierra Club, Prairie Chapter
Sierra Club, Youth representative
Suncurrent Industries
TransAlta Corporation
Treaty 8 First Nations of Alberta
University of Calgary, Program in Risk Communication & Public Policy
West Yellowhead Community Futures Development Corporation
Wild Rose Agriculture Products

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE FREDERICTON WORKSHOP
HELD ON JUNE 17, 2002 AT THE SHERATON FREDERICTON

1. INTRODUCTION

The Fredericton workshop was attended by 30 participants from a range of industry and business sectors, utilities, environmental and health organizations, municipalities, universities and First Nations. This report is accompanied by a list of the organizations represented at the meeting.

2. VIEWS ON THE ANALYSIS

Need for greater regional specificity and attention to competitiveness

A concern was expressed by a number of participants that there is inadequate reflection of key realities of the New Brunswick (NB) economy
:

- NB imports fossil fuel and exports electricity. Paying for emissions associated with combustion will drive electricity costs up and affect the competitiveness of NB electricity in the US.
- NB has energy-intensive, export-oriented industries. (Pulp and paper is a key example, accounting for a large proportion of provincial employment.) Higher energy costs will also make the products of these types of industries less competitive.
- Access to natural gas is very constrained, limiting options for fuel-switching to reduce emissions.

Need for a broader analysis

Some participants felt that effort should be made to assess effects against alternative measures of well-being or progress such as Genuine Progress Indicator. It was also noted that avoided impacts and co-benefits (e.g., cleaner air) are not reflected in the modeling; and also that the stimulus to innovation and associated commercial opportunities may be underestimated.

Some additional questions and perspectives include:

- A concern that modeling does not seem to reflect the realities of capital stock turnover (partly because it is driven by the Kyoto time-frame).
- A question as to whether modeling should reflect the fact that a significant proportion of required emissions reductions will likely result from municipal and provincial plans.
- A question as to whether administrative/transaction costs associated with implementation of an emissions trading scheme (and the differences in costs between an upstream versus large final emitters approach) are reflected.
- It was also suggested that more extensive and/or detailed modeling of targeted measures would be appropriate.

Questions Regarding Outcomes

There was a view that adverse impacts on major industrial electricity customers (e.g., paper and

allied products) is not fully captured in the model. Electricity accounts for about 20% to 25% of the cost for thermo-mechanical pulp and paper, and the model clearly shows that electricity will be significantly more costly in both the $10 and $50 carbon price scenarios. Such a jump in production costs would inevitably have some impact on sales and in particular, exports. A more general question was raised about the likelihood of increased GDP, notwithstanding higher energy prices, under option 1. Some skepticism was expressed about the potential for revenue recycling via personal income tax to compensate for the effect of higher energy costs on business and employment. Thus, some participants felt that the adverse impacts of the cases are understated. It was also suggested that whereas the results of several scenarios show a negligible or even positive impact on GDP, the offsetting reality of a probable increase in the Consumer Price Index (CPI) is not portrayed.

3. VIEWS ON THE OVERALL APPROACH OF THE FEDERAL DISCUSSION PAPER

Views on the overall approach were given following presentations on the federal Discussion Paper and the Alberta Plan, Although there was agreement across the board that climate change needs to be addressed, there are opposing views on how to proceed. Thus, strong opinions were expressed by numerous participants both in favour of ratifying Kyoto, and in favour of an alternative "made in Canada' approach. It was also noted that the Atlantic Chamber of Commerce has unanimously agreed to ask the federal government not to ratify Kyoto.

Opposition to ratification was mainly based on competitiveness concerns related to the fact that Canada (and NB's) largest trading partner is not going to ratify; and more broadly, that Canada would be the only country in the Americas to be bound by Kyoto commitments. It was suggested that the end result will simply be a shifting of investment and emissions to the US and other non-signatory countries (or signatories without targets).

Building on the AMG discussion, very strong concern was expressed by some about a bias in the system against electricity exports versus fossil fuel exports. The fact that emissions from electricity are counted against the electricity producer even if the electricity is exported, whereas combustion emissions associated with exported natural gas are not counted against the gas producer, imposes a relative penalty on electricity exports. The bias would be exacerbated with cleaner energy export credits, because these credits would only be available for exported natural gas , and not for exported electricity generated with natural gas.
It was suggested by some that the debate not be cast solely in terms of how to meet Kyoto, but rather in terms of how to address the need for GHG reductions; and that in this context, a "made in Canada" option that reflects trading realities in North America be developed for discussion. Support was also expressed for the way in which the Alberta Plan reflects a realistic time-frame for capital stock turnover.

On the other hand, several participants expressed strong sentiments and views in support of ratification. It was pointed out that today's children and young people will be living with the world created by the decisions made on this issue; and that their future is seriously at risk.
Several participants pointed to the need for a longer-term outlook, noting that Kyoto only goes a small way towards the reductions that will ultimately be required. The concern is that an exclusive focus on Kyoto commitments and timelines may drive inappropriate investment decisions that may make necessary next steps more difficult. Thus there is need for policy

approaches, and modeling, that reflects the longer-term.

In a similar vein, it was suggested that there is an inappropriate bias towards buffering the impacts of Kyoto commitments on the very industries that are high emitters of GHGs. The view expressed is that this is likely to be counterproductive in the longer-term, since a transition away from such industries is required for sustainable development; and clear signals to this effect are better delivered sooner rather than later.

There was disappointment expressed that aboriginal contributions warrant only a small paragraph in the discussion paper; and that this does not do justice to the potential contribution from first nations. Aboriginal elders have important perspectives on the issue, and can have a major positive influence.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Targeted Measures

There was ggenerally strong support for targeted measures as a means not only of addressing climate change, but also of keeping investment and benefits in Canada, and of counterbalancing some of the competitiveness impacts. Some participants mentioned the importance of other associated benefits.

One participant commended the fact that the menu of measures in Appendix II of the Discussion Paper represents relatively comprehensive sectoral coverage; and suggested that the future for Canada lies in a strategy that supports and enhances innovation. The importance of opportunities to prod the marketplace to stimulate emission reductions was noted. It was also suggested that the federal government should focus on policy instruments to facilitate and add value to municipal and provincial government actions. It was noted that there is need to change lifestyle choices and patterns of consumption for the longer term.

As an additional general point, it was noted that the availability of natural gas in NB would open a range of opportunities in many sectors, while contributing to emissions reduction. In this context, it was suggested that measures be put in place to support natural gas infrastructure and market development, and specifically, to promote east-west gas transmission.

Participants reviewed the portfolio of measures presented in Appendix II of the Discussion Paper, with a particular focus on their relevance in the NB context:

Electricity

There was support for incentives for renewables. Ethanol and wind-power are especially important in the NB context.[2] Access to power from the Churchill hydro project (via a

[2] A commitment was made at the workshop to provide information about the basis for the estimate of 13 MT of GHG reduction from the measures related to renewable sources for electricity. The reductions would derive from a substantial increase in existing support. The wind power production incentive would be extended to further MWs of capacity. Other emerging sources (e.g., biomass, innovative hydro technologies such as ultra low-head hydro) would also be eligible for this incentive. The Action Plan 2000 Market Incentive program would also be extended beyond residential, to include commercial and industrial markets. Finally, there would be a small program to pilot

north/south transmission corridor) was also a suggested priority.

It was suggested that the covenants approach proposed by the CEA should be considered, including the need for national renewable portfolio standards and emission performance standards (phased in to take account of capital stock turnover).

Finally, it was noted that there is coal-fired electricity in NB, and the status of research and pilots on coal gasification and "clean coal" are therefore of interest.

Buildings

There was some support for continuing to build on voluntary approaches in the residential sector; and more promotion to the homebuyer to increase demand for efficient homes. It was noted that while the number of certified R2000 houses is small, absorption of the approach into other housing is phenomenal. It was also noted that Atlantic Canada, and NB in particular, has led the country in uptake of R2000 housing and residential uptake of energy efficient housing in general; in part because of support from the provincial utility. One concern with the regulatory approach to R2000 housing is that there could be significant impediments to implementation (e.g., related to heating system design requirements and the ability to engage mechanical contractors). A general need for tax relief to reward better consumer choices was also suggested; and one area where this is important is housing.

On the commercial side, it was noted that many initiatives will take place simply because they save money. However, larger changes related to major equipment would have to take place within the context of a capital turnover timeframe of 10 to 20 years. It was suggested that improved regulation may play more of a role; but a key need is to move infrastructure (e.g., natural gas infrastructure) forward.

Industry

Capital cost allowance and tax reductions could help encourage quicker turnover of capital stock.

Municipalities

Some participants noted that municipalities are in an excellent position to deliver the message and the programs to a large segment of the population. There is a lot of interest and commitment by municipalities (it was noted that FCM voted 80% in favour of ratifying Kyoto as quickly as possible); and an inherent capability. However, resources are seriously constrained.

The need to focus on longer-term urban planning and lifestyle issues was raised by a number of participants. The strong relationship between urban sprawl and emissions (especially driven by increased use of automobiles) was cited. It was noted that change cannot happen (e.g., a shift to transit) if choice is not available.

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distributed generation (e.g., photovoltaics on buildings) in different market situations.

Transportation

A question was raised about whether any of the targeted measures promoted rail. It was pointed out that one of the measures is designed to promote a modal shift from truck to rail for freight. One participant noted that by-laws could have a large impact, citing a case from California where a by-law prevented companies from offering free parking to employees.

Agriculture

Nutrient management would deliver a lot of reductions and meet other policy objectives (e.g., water quality). Soil conservation measures are also important. Because incentives programs tend to be short-lived, offsets were considered to provide important means of creating long-term incentives.

4.2 Domestic Emissions Trading

Some participants wondered why there is any question about the superiority of the broad-as-possible approach to DET. It was noted that it is more efficient, less bureaucratic, less economically burdensome (and may indeed improve GDP and employment), and more progressive than the alternative. The fact that it affects some industries and regions more than others was deemed to be a simple reality associated with the polluter pays principle; one of the policy objectives listed in the Discussion Paper.

A countervailing view is that the approach presented in Option 4 is moving in the right direction (is "the least offensive"). The need to be very strategic in the context of trade relationships with the US was cited.

4.3 Purchase of International Emission Permits

Questions were raised about how the system would work; and a strong concern was expressed that it would simply mean a loss of investment capital from Canada. With this in mind, one participant suggested the following proposed hierarchy, reflecting a preference for domestic action:

- Focus first and primarily on real reductions at home, and on domestic trading
- If necessary, industries in covered sectors would purchase permits from trading partners (to maintain healthy trading relationships and markets)
- As a last resort, industries could obtain permits from the broader international market, and/or through JI and CDM.

In this schema, government purchase of international permits is the least favoured option. In response it was suggested that while this is generally a reasonable approach, it is important to remember that industrial countries must help provide leadership to convince developing countries to come on board. The CDM is one mechanism for doing this.

5. PREFERRED OPTIONS AND MIX OF INSTRUMENTS

Participants from environmental organizations favoured options that supported Kyoto ratification and tended to favour Option 1 as the most efficient and beneficial overall. The logic of an

alternative that would impose higher burdens overall for the sake of regional equity was questioned. On the other hand, there was also some sense that targeted measures would better enable the majority of reductions to be made in Canada; and enable other policy objectives to be pursued while addressing climate change.

Industry participants tended to favour approaches that did not involve ratification, and pointed to a need to balance climate protection and economic health in the context of current realities (i.e., the US decision not to ratify). Some preference for a North-American approach was noted. Some business representatives reiterated concerns that an auctioned approach would have a significant adverse effect on the NB economy; and the risk of serious depopulation of Atlantic Canada was also referenced. They indicated that Option 4 is moving in the right direction, but is not sufficient given our ties to the US.

6. RISKS

Risks of not ratifying

The following risks associated with not ratifying Kyoto were identified:

- Damage to international relationships and reputation
- Insufficient political will to act in the absence of a Kyoto commitment; with a resulting haphazard and inadequate response.
- Loss of domestic and international will to act – in the absence of the Kyoto discipline.

The question was also raised of why Canada would tie its future to the country that is currently the largest per capita emitter of GHGs, and is not forward-thinking. Those who support ratification also believe that the risks to competitiveness are overstated; that the Canadian public is ready to take on the challenges; and that ratifying Kyoto will ultimately make us more competitive.

Risks of ratifying

Opponents of ratification believe that the will to act is there and note that significant action is already being taken. The risks of ratifying were characterized as follows:

- Reductions achieved in Canada will be at the expense of competitiveness and investment (i.e., a large drain on the domestic economy); and without net global benefit. Alternatively, investment will only remain at the expense of the value of the Canadian dollar.
- Higher energy costs will negatively affect value-added activities in Canada, and particularly in a highly energy-intensive economy like NB. The economy will be more strongly driven towards primary resource extraction and export.
- The reality is that despite large increases in energy efficiency, growth is pushing emissions up. Given the legally binding nature of the agreement, and the likelihood that targets cannot be met domestically, Canadians will have to pay (either through their industries, or through government purchases of international credits).
- There may be conflicts with respect to credit trading under the New England Governors/Eastern Canadian Premiers Plan.

It was also suggested that trusting the government to recycle revenues as a means of counter-balancing impacts on the consumer is risky.

Other risks

It was noted that there is a need to settle the question of the relative permanence of soil sinks. The risk that inappropriate investment decision will result from a focus on relatively short-term, initial targets was also reiterated.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS - FREDERICTON, JUNE 17, 2002

Atlantic Provinces Chamber of Commerce
Blue Green Society – Mt. Allison University Study
Canadian Manufacturers & Exporters
City of Fredericton
Columbia Natural Resources Canada
Conservation Council of New Brunswick
Eastern Canadian Soil & Water Conservation Centre
Falls Brook Centre
Fraser Papers (Canada) Inc.
Irving Oil Ltd.
McCain Foods (Canada)
New Brunswick Environmental Network
New Brunswick Federation of Agriculture
New Brunswick Lung Association
New Brunswick Mining Association
New Brunswick Museum
New Brunswick Power
Noranda Inc. – Brunswick Smelter Division
R. Clarke Designs Ltd.
Red Bank First Nations
Saint John Citizens Coalition for Clean Air
Université de Moncton
Université du Nouveau-Brunswick

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE REGINA WORKSHOP
HELD ON JUNE 17, 2002 AT THE DELTA REGINA HOTEL

1. INTRODUCTION

The Regina workshop was attended by 33 participants from a range of industry sectors and business associations, community groups, municipalities and NGOs. Ron Zukowsky, Executive Director of Policy and Assessment, Saskatchewan Environment, opened the workshop on behalf of the Government of Saskatchewan. Mr. Zukowsky noted that many of the workshop participants have had considerable previous involvement through the Saskatchewan Stakeholder Advisory Committee on Climate Change and through the Climate Change Saskatchewan Hub Advisory Committee.

2. VIEWS ON THE ANALYSIS

Workshop participants raised a number of concerns with the analytic assumptions and results.

Several workshop participants expressed concern regarding impacts on Canada's overall competitive position. The effect of a 2% reduction in GDP on Canada's competitive position was considered to be more severe than portrayed, given existing concerns about Canada's productivity performance.

Effects on employment in Saskatchewan and other vulnerable regions were thought to be understated - unemployment may be a better measure - and the concern was raised that reduced competitiveness would increase out-migration from Saskatchewan and Canada.

Concern was also expressed about impacts on the competitiveness of particular sectors in Saskatchewan. It was suggested that the impact on Saskatchewan steel production costs would be significantly higher than the national average increase of 15%, due to the industry's dependence on electricity produced from coal. Participants noted that the Saskatchewan steel and mining industries are also vulnerable to the effects of fuel price increases on transportation costs, given the distance to markets. Concerns were also expressed that there are limited opportunities for further reductions in the oil and gas and pipeline sectors, given available and anticipated technologies and the energy efficiency gains already made. The sensitivity of the analysis to changes in grain and other commodity prices was also noted.

2.1 Concerns about assumptions and methodology

Views expressed included:

- A range of assumptions on emission reduction targets should be used for the post-2012 period.
- The models do not recognize the step-wise nature of business investment decisions nor adequately address the long capital stock turnover times in capital-intensive resource industries.
- It was suggested that reductions expected from increased renewable energy generation and carbon storage in the first commitment period were overly optimistic.

- The modeling should recognize that forest and agricultural sinks are price sensitive and that the analysis understates the potential for agricultural sinks, given the work of the issues table.
- A question whether the modeling adequately treated decisions to invest in nuclear power generation domestically.
- Concern that the modeling does not include co-benefits and costs of climate change impacts.

2.3 Suggestions for Further Analytical Work

Participants called on federal and provincial / territorial governments to conduct more detailed, and sector-by-sector analysis, at the provincial level particularly as it affected the way in which investment decisions are made. They suggested that this additional analysis should incorporate a range of values for all important parameters, not just permit prices, and should especially consider a range of "Kyoto gaps" and emission reduction scenarios, as well as different assumptions regarding the achievability of emissions reductions expected from existing and anticipated policies and programs. Participants were especially concerned about the assumptions made concerning post-2012 emission reduction targets, and suggested that additional analysis be done across a range of targets. Further, participants requested additional analysis of alternative revenue recycling mechanisms, including use of the corporate tax system and the recycling of revenues into investments in new technology. A request was also made to include co-benefits and the costs of climate change impacts in the analysis.

3. VIEWS ON THE OVERALL APPROACH

Participants emphasized the particular challenges faced by Saskatchewan, as a greenhouse gas intensive economy, in meeting the Kyoto target. Concerns were expressed about the impacts of climate change policies, and participants emphasized that the federal plan needs to be clear on how it will address inequitable impacts on regions and key sectors. Participants also emphasized the need for federal funding to support specific action on climate change. Participants expressed support for an approach that considers the long-term nature of the climate change issue and the important role that individuals, households and communities play in contributing to the climate change problem. Participants called for more and broader targeted measures that involve individuals, households and communities and address energy demand growth. Several participants emphasized that significant increases in public education and outreach are necessary to communicate the significance of the issue, the impacts of ratification and the potential opportunities for behavioral change. Participants expressed a preference for domestic over international actions to ensure that co-benefits accrue in Canada, and to position Canada well for future commitment periods. Participants also agreed on the need for governments to clarify their positions and begin to give clear and consistent signals on both short and long-term plans, as the current uncertainty contributes to delayed action as well as delayed or relocated investment.

Mixed opinions were voiced on ratification of the Kyoto Protocol. Some participants expressed a clear preference for the development of a fifth, "non-Kyoto" option. This option could be developed in concert with Canada's NAFTA partners, and might incorporate elements of the proposed Alberta plan and the US approach, which both target reductions in emissions intensity over longer time frames. A view was also expressed that with the U.S. out of Kyoto, the federal government needs to make more substantial efforts to gain U.S. cooperation on climate change.

It was suggested that the approach provided for in the Discussion Paper expected too much too fast, not taking into account the time required for capital stock turnover and major structural changes in the economy. A range of views were stated on the Alberta plan, from a view that the Alberta plan is a "non-starter" as it would not result in an overall reduction of emissions, despite some overlap with the federal Discussion Paper, to a view that the Alberta approach would achieve significant reductions.

It was also suggested that it is unrealistic to make such an important decision in 2002 timeframe. Other participants, however, argued that Canada needs to ratify the Kyoto Protocol now, in order to send the right signal to Canadians, industry, governments, and the international community.

Participants' views on cleaner energy exports also diverged. Some participants expressed the view that credit for cleaner energy exports is essential, since Canada will have a difficult time in meeting the Kyoto target without U.S. participation. It was suggested that the federal Discussion Paper should include credit for cleaner energy exports under all four options. Other participants argued that Canada should not pursue cleaner energy exports, and should instead concentrate on achieving real, long-term emission reductions in energy-intensive domestic sectors.

In discussing the stated policy objectives, participants suggested that three additional objectives be considered:

- The need to position Canada to address climate change in the longer term, not just to 2012
- Sectoral equity and the need to ensure no particular industry sector is unfairly impacted
- The need to inform Canadians on climate change and the choices that will be required .

The federal government was also called upon to ensure the objective of reducing emissions was integrated with other national policy goals, including innovation, productivity, competitiveness, and affordable housing.

Participants expressed a strong preference for domestic action and targeted measures in particular. Participants expressed the view that cost-effective targeted measures could accomplish much more than the 22-25 MT of emission reductions shown under Options 1, 3 and 4. Participants were also concerned that reliance on purchases of international permits could undermine Canada's competitive position and the polluter-pay objective, while at the same time encouraging industry and Canadians to take a short-term approach to this long-term issue.

A number of participants favored incentive and information-based tools over regulatory approaches. Concern was raised about a perceived over-reliance on regulatory approaches with respect to energy efficiency in new buildings, while the approach to retrofitting existing buildings uses incentives. More generally, participants expressed concern that by relying on regulatory approaches government would be transferring responsibilities for complying with the Kyoto Protocol to industry, without providing them with the tools needed to get the job done.

The need to explicitly incorporate communications and education strategies in the options was highlighted. Participants called upon provincial and federal governments to take the steps necessary to ensure that policy measures proposed and their expected costs and impacts are communicated to communities and individual Canadians, in as clear and concise a manner as

possible, to enable them to make an informed decision on the proposed ratification of the Kyoto Protocol.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Domestic Emissions Trading (DET)

Participants expressed limited support for DET, and suggested that the federal Discussion Paper places too much overall emphasis on emission trading. Participants noted the complexity of this approach, and raised numerous concerns and questions:

- The flexibility offered by the design of Option 4 was noted, but concerns were raised that the "scale back" factor represented a tax on efficient operations that would increase uncertainty and discourage investment. Concerns were also expressed that the design of Option 4 would take too long to complete and could lead to highly contentious debate among stakeholders.
- A view was expressed that Option 1 is more comprehensive and allows inequities to be addressed in a direct and transparent fashion through revenue recycling
- Participants noted the need to address regional and sectoral impacts through DET design, whether through revenue recycling (as in Option 1), allowance allocation, or other approaches. It was noted that recycling via the tax system could create unequal benefits since higher income earners would benefit most. The point was also made that revenue should be recycled back to industry for further technology and energy efficiency investment.
- Concerns were raised about the administrative burden of DET, and the importance of systems for verification and liability was noted.
- The need for industry input to the design of DET was emphasized.

Participants asked for clarification regarding what sectors and activities would be eligible for offsets under Option 4, and questioned why offsets were not included in all of the options. Governments were called upon to recognize the past and potential emission reduction contributions arising from agricultural soils management practices in Saskatchewan. The need to clarify sinks ownership issues was also noted. Assuming appropriate rules, however, participants were supportive of the inclusion of agricultural sinks as DET offsets.

A view was also expressed that Domestic Emissions Trading is "flawed", as it was perceived to transfer responsibilities from emitters, and might simply delay the actions required to achieve the needed long-term reductions in emission intensive sectors.

4.3 Targeted Measures

Participants expressed a general preference for targeted measures in a number of areas.

Behavioral Issues:

It was suggested that addressing climate change would require behavioral changes as much, or more than technological change. Participants noted that 80% of emissions are related to energy consumption, and there is therefore a need to target individual Canadians and their communities

more fully through the targeted measures, while also including communities in the decision-making process. Overall, participants recognized the need for increased understanding and awareness across all sectors, and suggested that best practices in all key sectors and activity areas should be used to demonstrate successful Canadian approaches. Policy makers were also urged to explore a range of social marketing approaches to engage citizens in contributing to emission reductions.

Technological Issues:

Participants called for governments to place priority on early actions that could improve the competitive position of Canadian industry by increasing the uptake of energy efficiency and conservation actions. Participants also called for governments to employ a variety of financial and fiscal measures to remove barriers to the introduction of new technology, for example capital cost allowances and investments in research and development. Attention was drawn to the successful experience in Alberta, where a negotiated reduction in gas flaring was supported by a royalty reduction measure. In considering technological change, the federal government was urged to exercise caution with approaches that favored fuel switching to natural gas. It was suggested that investment in the expansion of gas pipeline infrastructure would not happen in the absence of long-term security of supply, or without confidence that emission reduction targets would permit long-term use of natural gas.

Sectoral Issues:

The electricity sector received considerable attention during the discussion on targeted measures. In particular, it was suggested that the targeted measures proposed for the electricity sector in the federal Discussion Paper might be overly optimistic. It was recognized that Canadians have not, historically, responded strongly to demand side management measures. As such, there is a need to develop an integrated, national approach addressing the overall growth in electricity demand. Concern was also expressed that although new technologies such as cleaner coal, carbon storage, and renewable generation are under active development, they may not be able to play the role anticipated for them within the 2012 timeframe. It was also noted that the electricity sector would need to continue to rely on a variety of approaches to reduce emissions, and the suggestion was made that nuclear power not be excluded from the potential mix. Saskatchewan's ample uranium deposits were noted, and requests were made to consider the long-term potential for nuclear energy, opportunities for offsets from nuclear, and the contribution of uranium exports to cleaner energy exports. Other participants questioned the merits, sustainable development contributions, and economics of nuclear energy. A fuller discussion of the future role of nuclear power in addressing climate change was suggested.

Agricultural soils and forestry carbon sinks were discussed in detail. It was suggested that with the right incentives, activities to enhance agricultural sinks could make an important contribution to meeting emission targets. Participants suggested that such incentives would also help revitalize agricultural activity in Saskatchewan and make it more profitable. The importance of distinguishing between agricultural management practices which generate emissions "reductions", and the enhancement of sinks to provide "removals" of carbon was emphasized. It was also suggested that sinks-related activities should be selected because of their broader environmental benefits, rather than simply to generate emissions offsets. It was also noted that sinks require both creation and maintenance actions, and that it is important to view sinks-related

activities as services and not commodities. It was further noted that failure to recognize the ongoing investments and activity required to maintain sinks might result in an unwanted transfer of liability from emitters to landowners – in particular the landowner would be responsible for the ongoing costs of maintaining the sink and for the risk that it could be lost (e.g. through fire). Participants noted that prior and ongoing efforts to develop and maintain sinks in Saskatchewan were going to be claimed by Canada, yet there has been little acknowledgement or recognition for these efforts. A view was expressed that recognition of these past efforts is critical, since the Kyoto reporting timeframe (2008.-2012) may create an incentive for landowners to reverse existing sinks in the years leading up to the commitment period.

The need to link afforestation to long term sustainable forest management objectives and planning for the forest industry was emphasized, since incentives for afforestation for sinks purposes can be expected to be temporary. Linking commercial forest operations with incentives to individual landowners was suggested as a mechanism to ensure sinks are maintained. Some participants stated that the ownership of sinks and offset credits needs to be assigned to farmers and other landowners.

Participants called on the federal government to put in place effective transportation measures. It was suggested that the transportation measures in the Discussion Paper focused too much on fuel switching instead of addressing transportation infrastructure and efficiency. Participants called for additional measures to support urban transit and rail transport. Concern was also raised regarding the ongoing shift in Saskatchewan from rail transport of grain to shipments by road, which significantly increases emissions from freight transport.

Questions were raised as to whether the proposed targeted measures would prove capable of delivering the anticipated reductions. There was a concern that some of the proposed measures would not be cost-effective, and that taxpayers would not be willing to pay the price (e.g. public transport). Concerns were expressed about the extent of analysis conducted on the targeted measures, and it was suggested that further cost-benefit analysis be done before decisions are made. The need to customize targeted measures for different jurisdictions was noted, as blanket approaches are unlikely to perform as intended, and some participants called for much greater involvement by municipalities in the design and implementation of targeted measures.

Participants who had also been members of the various Issue Tables felt that the Discussion Paper did not adequately reflect the recommendations in that process. The federal government was called upon to carefully consider the recommendations from the Buildings, Public Education and Outreach, Sinks, Transportation and other Issue Tables in the preparation of the plan.

4.4 Purchase of International Permits

A strong preference was expressed for a primary focus on domestic action, with limited purchase of international permits as a risk management strategy in the shorter term. There was a clear distinction drawn between government and private purchases, with a number of participants critical of the use of taxpayer dollars for international purchases rather than for domestic action. Another view was expressed that government has a role in the purchase of international permits. Serious concerns were raised that international permits might not be available in the longer term, and also that these purchases weaken Canada's competitive position by not addressing the longer term need to reduce emissions domestically and by leading to capital outflows that might

strengthen the position of some of Canada's international competitors. Concerns over availability and cost of international credits in the second commitment period was also raised.

Several times during the day, participants voiced strong opinions against the purchase of so-called "hot air" from Russia or the Ukraine. Skepticism was also expressed about the reliability of "greening hot air", given the uncertain investment climate in these countries. There was some support for investments through the Clean Development Mechanism provided that they are in new projects that will deliver "real" emissions reductions.

As with DET, the strong need to address verification and liability issues for international trades was noted.

5. RISKS INVOLVED IN RATIFYING OR NOT RATIFYING THE KYOTO PROTOCOL

Participants shared the view that governments must provide leadership and industry must take steps to address the risk of climate. However, divergent opinions were expressed concerning the risks of ratifying or not ratifying the Kyoto Protocol.

If Canada ratifies the Kyoto Protocol and takes the steps necessary to meet its associated emission reduction target, a number of participants expressed concern that investors would react negatively. It was suggested that ratification of the Protocol would damage Canada's competitive position, given that Canada's largest trading partner has rejected the Kyoto Protocol. As well, it was argued that the short time required for meeting the stated targets, by 2012, was at odds with business investment and decision-making practices, and that forcing the required reductions in the short term could result in long-term harm to the economy, and might also prevent the overall climate change objectives from being reached.

Risks of ratification identified by participants included the risk that much larger than anticipated price increases would be required to actually change consumer behavior, increases that might be unacceptable to individual Canadians and to the economy more generally. Risks to strategic industries were also noted, and governments were encouraged to take mitigative action, especially where there are only a few plants in Canada.

Other participants noted the risks of not ratifying the Kyoto Protocol, including risks to the environment as well as Canada's competitive position. Failure to ratify, it was suggested, would make it difficult for Canada to encourage international action by developing nations, action that is recognized as necessary to protect the Canadian and global environment in the longer term. The potential not only for losing hard-won gains on sinks credit that Canada had negotiated internationally but also the difficulty Canada would face in making any future gains in international climate change negotiations were also identified as risks of not ratifying. Domestically, it was suggested that a failure to ratify could lull industry, governments and individuals into a feeling that no meaningful action needed to be taken. It was also suggested that caution should be exercised regarding assumptions about inaction in the United States, given the level of activity at the state level and among leading companies. In this context, it was suggested that meeting the Kyoto target could help ensure that Canadian industry remains competitive with industry in the U.S.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS - REGINA, JUNE 17, 2002

Agriculture Producers Association of Saskatchewan
Agrium Inc.
Cameco Corporation
Canadian Association of Oilwell Drilling Contractors
Canadian Association of Petroleum Producers
Canadian Association of Petroleum Producers
Canadian Manufacturers and Exporters
City of Regina
Climate Change Saskatchewan
Climate Change Saskatchewan
Enbridge Inc.
Gaia Group
IPSCO Inc.
Luscar Ltd.
Nexen
Potash Corporation of Saskatchewan
Saskatchewan Association of Rural Municipalities
Saskatchewan Chamber of Commerce
Saskatchewan Council for Community Development
Saskatchewan Council for International Cooperation
Saskatchewan Environmental Society
Saskatchewan Home Builders' Association
Saskatchewan Mining Association
Saskatchewan Outdoor & Environmental Education Association
Saskatchewan Research Council
Saskatchewan Soil Conservation Association
SaskPower
SGI Salvage
Soil Conservation Council of Canada
TransCanada Pipelines Ltd.
University of Regina - Faculty of Education

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE MONTREAL WORKSHOP
HELD ON JUNE 19, 2002 AT THE DELTA CENTRE VILLE

1. INTRODUCTION

The Montreal workshop was attended by approximately 40 stakeholders from a range of industry sectors and business associations, environmental NGOs, academic institutions and aboriginal organizations. This report is accompanied by a separate list of the organizations represented at the meeting.

The Workshop began with a presentation by Ouranos on the modelling of climate change impacts and regional adaptation.

2. VIEWS ON THE CONSULTATION PROCESS AND ANALYSIS (AMG)

Participants expressed a strong desire for more information on the process for assembling the Federal Plan in the summer and the public and stakeholder consultations in the fall. There was some debate about the significance of public support for Kyoto, given differing views on the public understanding of the issues. Although the lack of public understanding was generally acknowledged, some held the view that the public understood the key messages.

Participants acknowledged the work of the Analysis and Modelling Group (AMG), had some questions of clarification on the details, and also raised concerns about assumptions used in the analysis, or noted areas that could have been considered in the modelling analysis. Participants also noted some important implications of the analysis.

Some participants noted that the analysis was based on a fairly narrow interpretation of macro-economic cost (i.e. GDP), which failed to capture broader measures of quality of life such as those that are included in the Genuine Progress Indicator (GPI) and also failed to characterize the distribution of burden between generations. Others noted that the analysis did not account fully for the effects of innovation (particularly in the development of renewable energy), health and economic co-benefits, and the costs of inaction. It was acknowledged that modelling of impacts was difficult at this stage. However, it was suggested that the impacts should at least be acknowledged. On the other hand, there was also a view that the analysis relied on somewhat optimistic assumptions concerning the carbon price and the availability of sinks credits.

There were several suggestions for improving the modelling through sensitivity analyses to examine alternative scenarios, such as: success or failure in negotiating credits for Clean Energy Exports; availability or not of credits for sinks; more aggressive emission reductions in the second commitment period; and different levels of domestic action vs. purchases of international permits.

Several participants sought clarification on the assumptions and results. One sought information on the assumptions and results regarding internal trade in electricity, noting that there was little inter-provincial transmission capacity compared to intra-provincial consumption. Another participant sought clarification on the reasons for the large decrease in economic activity associated with gas distribution. There was also interest in understanding the sources of the 23

MT of new reductions under option 3 (esp. in knowing the breakdown between energy efficiency improvements and plant shutdowns). There was also a more general interest in quantifying or, at least, characterizing the reliability and accuracy of the estimates.

The following views were also raised:

- One participant questioned whether or not the modelling took into account the price-taking nature of many industries.
- Another participant challenged the view that Option 2 would necessarily be more expensive.
- It was suggested that there might be significant hydro-electric potential in other provinces that would reduce the costs of compliance.
- It was suggested that the fiscal rule should be modified to explore the impacts of raising funds through targeted taxes.
- It was suggested that U.S. political developments and the possibility that the U.S. might eventually ratify Kyoto in the 2004-2008 timeframe should be considered.
- It was suggested that the macro-economic results indicated relatively minor impacts that did not justify the need for credits for Clean Energy Exports.

3. VIEWS ON THE OVERALL APPROACH

A participant noted that the expression of views on an overall approach was complicated by the presentation of the options. Instead of being associated with specific policy instruments, the options contain too many changing variables.

Although there was strong support for action on climate change, there were different views on ratification of Kyoto. ENGO participants supported ratification and argued for greater government policy coherence (e.g., stop supporting oil and gas development; reduce support for automobile transportation; include impact on GHG emissions in the analysis of all new government programs). However the views of industry participants varied. Some favoured a longer timeframe and supported the Alberta Plan or another 5th option. Other industry participants supported ratification subject to review of the detail of implementation measures.

Supporters of ratification made the following arguments:

- There is already a public consensus on the issue (esp. in Québec)
- The adverse impact on high emitters of GHG is unavoidable if we are to reduce GHG emissions
- Concerns about competitiveness have been exaggerated (many companies have already demonstrated that they can reduce emissions at minimal cost or at a profit.)
- Change is a normal part of industrial development
- GHG emissions could be reduced by 50% using existing technologies
- Climate change impacts are significant and will progress exponentially – we need a global approach
- Kyoto provides a framework to establish targets and hold ourselves accountable
- Inaction or slow action is inconsistent with sustainable development
- Uncertainty associated with ratification (e.g. permit prices, etc.) is well within the range of uncertainty that businesses are used to dealing with.

Opponents' views included the following:

- Not enough is known about the costs and impacts
- The timeframe is too short
- There will be too many added costs
- There will be a severe adverse impact on the competitiveness of natural resource industries and exporters
- Co-benefits are likely to be achieved through other targeted programs anyway
- The expected rate of innovation and technology uptake is too optimistic
- A longer term vision is needed

On the question of a longer-term vision, there was general agreement that further action would be needed in keeping with the United Nations Framework Convention on Climate Change (UNFCCC). However, some participants viewed the suggestion of a longer-term plan as a delaying tactic.

There was little support for the concept of Clean Energy Exports. Participants either felt that such credits were inappropriate and unnecessary, or that there was a negligible chance of success in achieving their acceptance. A few participants also noted that by asking for these credits, Canada was being egotistical, and was risking harm to its international reputation.

Similarly, several participants expressed opposition to the idea of purchasing international emission permits. Some were concerned about the cost; others were concerned about not achieving emission reductions in Canada.

There were two views on the issue of further analysis. While many participants suggested a need for additional cost-benefit analysis, one participant noted that the level of detailed analysis and consultation conducted so far exceeds that undertaken for any other issue of this type.

The following views were also raised:

- One participant felt that Option 2 (All TM) was an inefficient choice
- One participant suggested a need to frame the approach more clearly in an international context, and providing more explicit recognition of the requirements of the UNFCCC
- One participant noted that Japan had provided compensation to exporters
- Another participant provided additional details on the Japanese approach, which is based on a challenge to industry to implement measures – the success of this approach has led the Japanese government to suspend application of new measures until 2005.
- One participant felt that the proposed federal options rely too heavily on taxation and regulation and should focus more on incentives

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Targeted Measures (TMs)

There was broad support for the use of TMs, in combination with some form of emissions trading.

Participants noted the following general views on TMs:

- Industry has already implemented many programs (e.g. natural gas efficiency programs) – it will be important to take this into account in assessing the potential and in designing future programs.
- Priority should be given to TMs that establish a framework of future more substantial reductions.
- Sectoral covenants should be used as much as possible as an alternative to regulation to ensure maximum flexibility of industry response – with respect to covenants, one participant noted with interest the Japanese approach which provides incentives to challenge industry to achieve the highest reductions.
- TMs need to be implemented sooner rather than later.
- Many TMs are cheap or essentially costless (e.g., reserving bus lanes on busy arteries). While Option 2 as a whole may be more expensive than Option 1, there are many cost-effective TMs that should be used.
- Governments should focus on TMs that help to restructure energy demand (e.g., changing urban design).
- Other than providing support for technology Research, Development and Demonstration (R,D&D), the government should be careful in providing financial support to avoid subsidies that could be challenged under trade agreements.
- As new technologies improve (e.g. solar, fuel additives), TMs may be more effective and less expensive than anticipated.
- TMs should be considered even for sectors that are covered by Domestic Emissions Trading (DET).
- One industry participant noted the challenge of dealing with the transportation sector, which represents a large proportion of emissions and is not covered by DET. In the view of this participant, the limited effectiveness of TMs in that sector implies the use of international purchases of permits to meet the Kyoto target.

Participants suggested a range of proposals for TMs, including regulatory measures, incentives, covenants and information programs:

Agriculture

- Incentives to support the use of bio-fuels and hedge-row planting.

Transportation

- Feebates or standards to improve vehicle fuel economy
- Urban transportation measures (high occupancy lanes, parking restrictions, cycle paths)
- It was suggested that existing infrastructure programs should be re-oriented to support GHG reductions
- Financial support for transit
- Long-term measures to support sustainable urban planning

Industry

- Covenants (e.g. similar to the accord between Québec and the Aluminium industry)
- Investment fund to overcome the barrier of short term payback expectations
- Regulatory reform to support hydro-electric development
- Support for carbon sequestration technologies

Buildings

- TMs should support existing programs before adding additional measures

There was also general support for education and awareness programs for the public.

4.2 Domestic Emissions Trading (DET)

There was some support expressed for some form of DET. However, this support was nuanced by a number of concerns, including the practicality of such a program with a limited number of market players., possibly high administration and transaction costs, as well as the reliability and validity of permits that are traded.

Some participants supported a broad system, however others were concerned that the scale of such a program and the impact on costs would have significant adverse impacts on competitiveness. These participants tended to prefer a focus on large final emitters.

There was extensive debate about the nature of the permit allocation system. Many participants supported an auction approach to avoid windfall gains for the most polluting industries. However others were concerned about the economic shock and large fiscal transfers associated with this approach. One participant suggested a compromise whereby 80% of permits would be distributed gratis and the remainder would be auctioned. It was also suggested that the revenues could be recycled back to affected companies, provided that this did not create an incentive for continued emissions. Another suggestion to avoid an economic shock was to phase-in the DET system over several years, beginning in 2004 or 2005, and providing more permits in the early years.

Several participants sought clarification on the proposed allocation method under option 4 and expressed concern about the fairness of this system to less polluting industries and energy sources (e.g. renewable energy providers should receive their fair share of permits). It was noted that option 4 seemed to cover only 2% more of emissions than option 3, which seemed to be little incremental gain given the added effort.

One participant suggested that provision for emission credits needed to be included. He reminded the discussion panel that Canada had developed extensive expertise in the use of credits that should not be lost.

4.3 Purchase of International Emission Permits

This subject was not formally discussed. Most participants seemed to support domestic action as preferable to the purchase of permits. However, some participants noted that it was likely that some purchases would be necessary.

There was some support for the use of the Clean Development Mechanism (CDM), provided that the credits were clearly incremental to a Business As Usual (BAU) scenario.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – MONTREAL, JUNE 19, 2002

Alcan
Alcoa
Association de l'Industrie de l'Aluminium
Association de l'Industrie électrique
Association des industries forestière du Québec
Association des Industries Solaires du Canada
Association minière du Québec
Association des produits forestiers du Canada
Centrale des syndicats du Québec
Centre d'écologie urbaine
Centre for International Sustainable Development Law (McGill University)
Centre patronal de l'environnement
Conseil canadien des électrotechnologies
Conseil canadien du porc
CO2 Solution
Environnement jeunesse Québec
Equiterre
Gaz Métropolitain
Gazoduc TQM
Greenpeace (Québec)
Group d'Études et de Recherche en Analyse de Décisions HEC (GERAD)
Groupe de recherche appliquéee en macroéecologie (GRAME)
Groupe de recherche en économie de l'énergie, de l'environnement et des ressources naturelles
Hydro Québec
Institut canadien de produits pétroliers
Institut de recherche en hydrogène-Université du Québec à Trois-Rivières
ISPAT Sidbec Inc
Kahnawake Environment
Lachine
Lafarge Canada Inc.
Manufacturiers et exportateurs du Québec
Mouvement au Courant
Multihydro Inc.
PAPRICAN
Simplot AgriBusiness
Sommet Mondial du Développement Durable
Stratégie Energétique
Union des municipalités du Québec
Union des Producteurs Agricoles
Union québécoise pour la conservation de la nature
Ville de Québec
Vivre en Ville

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE WINNIPEG WORKSHOP
HELD ON JUNE 19, 2002 AT THE HOTEL FORT GARRY

1. INTRODUCTION

The Winnipeg workshop was attended by 39 participants from a range of sectors including industry, environmental NGOs, and aboriginal organizations. A separate list of the organizations represented at the meeting is attached in Appendix 1. Opening remarks were given by the Honourable Oscar Lathlin, Minister, Manitoba Conservation. Minister Lathlin urged the federal government to ratify the Kyoto Protocol as he announced Manitoba's plan to reduce greenhouse gas emissions by up to 18% below 1990 levels by 2010 and up to 23% by 2012.

2. VIEWS ON THE ANALYSIS

Participants questioned several aspects of the analysis including the assumptions that were used, the impacts on different sectors in Manitoba and the results of the analysis.

The First Ministers' statement that "no region should bear an unreasonable burden" was questioned; some participants felt that energy producing provinces should bear a higher cost of reducing emissions while others suggested that those who consume the most energy should share a greater burden.

Assumptions

Some participants pointed out that recycling resources through the personal income tax system forfeits some of the benefits of other approaches such as investing in new technology or urban transit and enabling industry and community transitions to less carbon-intensive energy uses.

Concern was expressed by some participants that the potential for hydro-electric generation and inter-provincial transmission is not adequately captured in the analysis; others felt that the analysis emphasizes only those industrial sectors which are emitters of greenhouse gases and does not take account of sectors which may be affected and possibly have opportunities to respond in different ways (e.g. knowledge industries, insurance and other service sectors).

Sectors

Further analysis in specific sectors was recommended by several participants (e.g. transportation, mining, hydro), as well as for municipalities:

- show impacts on building construction separately from other construction (e.g. highways)
- consider the impact of increased transportation costs on different sectors in Manitoba (e.g. manufacturing, agriculture)
- improve accounting of economic contributions made by innovation. It was felt that the business as usual (BAU) case insufficiently captures the impacts of innovation on the economy.
- provide better information on employment quality (e.g. not just the number of jobs but also the types of jobs lost and created)
- provide analysis on impacts by municipality (e.g. not just sector/region/province)
- highlight potential impacts on profitability and competitiveness by sector.

It was also noted that the role the mining and metals sector plays in Manitoba is not adequately reflected in the results:

- smelting is a significant element of the mining sector and should be accounted for under mining not manufacturing
- current forecasts of future mining projects seem to be seriously understated and should be revisited.

In addition, it was suggested that separate results for the forestry sector be provided as it is an important industry in Manitoba.

Results

The following suggestions were made to improve the results of the analysis:

- discuss burden sharing issues in more detail to illustrate income distribution effects (e.g. to determine whether the costs of reducing emissions will fall on the parts of society that are least able to deal with them)
- analyze the effect of personal choice and consumer behaviour on sector change (e.g. transportation, energy use)
- discuss the confidence levels of the analysis
- discuss possible impacts of actions on the Canadian dollar exchange rate.

3. VIEWS ON THE OVERALL APPROACH

A range of views on the overall approach was expressed. There was a strong overall preference for taking action on reductions domestically as well as general concern about using "hot air" as an element of any plan.

Concerns were raised about potential additional costs in certain sectors such as manufacturing, including small- and medium-sized enterprises (SMEs) and agriculture, and the likelihood that additional costs could not be passed on to consumers resulting in loss of revenue to the sector. However, there was another view that consumers (and not just producers) must, and will, be willing to bear some of the burden as the market is demand driven. Some participants suggested highlighting the importance of personal choice and the need to change consumer behaviour to support and catalyze sector change (e.g. transportation, energy use).

Several participants felt that the options are too focused on economic analysis and stressed the need to consider the "big picture". It was stated that any option developed must address broader social and ecological perspectives and look at co-benefits, the need for change beyond 2012, the cost of impacts and adaptation, and the need to build in health benefits as real cost savings and the 'hook' to engage the public. Some stressed the need for "economic conversion" noting that the "old economic paradigm" will not serve us in developing a new future.

It was stressed that the Manitoba economy is based strongly on SMEs and that none of the options had adequately dealt with SMEs.

It was also recommended that the approach should include strategies that address all of the greenhouse gas emissions (e.g. in addition to carbon).

Policy Objectives

- Participants provided suggestions for improving the policy objectives:

- add an objective to capture the need for a plan beyond 2012 and for long term action
- reformulate the last objective (ensuring consistency with other national goals) to focus more specifically on co-benefits.

It was noted that there is the need for trade-offs between the "regional equity" (3rd objective) and "polluter-pays" (5th objective) objectives to be made explicit.

It was suggested that subsidies to the fossil fuel sector should be eliminated or changed to encourage innovation (e.g. alternative fuels). Some participants also stressed the need to ensure that consumers are willing and able to assume some of the costs of meeting reduction targets.

Cleaner Energy Exports

A range of views about credit for Cleaner Energy Exports was recorded. Some participants rejected the use of Cleaner Energy Exports as a BAU scenario that would not result in emissions reductions. A need to ensure that sustainable development goals are met in future hydro development was also noted.

An opposing view was expressed that Cleaner Energy Exports would provide a means of reducing overall global emissions and that obtaining credit for them would help make ratification more feasible for Canada. There was a question on whether Cleaner Energy Exports are a condition of ratification.

Agriculture concerns

Participants from the agricultural sector were concerned about the costs of reduction to primary producers. For instance, will individual farmers be forced to replace their tractors or other equipment? Will input costs (e.g. fuel, transportation, fertilizer) increase? Will new policies result in increased regulation and bureaucracy at the farm level? If yes, these costs are expected to be passed to individual farms and consumers and may affect the long term viability of the agriculture sector (e.g. passing farms to children).

Sinks

Some participants expressed concerns about the impacts of sinks credits on farm incomes, limits on production and use of sinks by future owners. Others supported sinks credits both for afforestation and agricultural practices, but noted that there are risks and liabilities in relying on sinks from forest management. The need to take into account possible sinks debits (e.g. forest fires) as well as credits was also noted. It was pointed out that we are required to take both into account.

Adaptation Issues

The need to consider adaptation in the overall approach was noted as was the need to include human and environmental health benefits in the options and analysis. The risk of significant costs to human health is difficult to model but important to consider.

Competitiveness Issues

Competitiveness issues were addressed by several participants (e.g. with non-Annex B countries). Some industries are unable to pass on costs of compliance and may be negatively affected in comparison to their competitors in such countries. Competitiveness with the US was also a key concern of several participants.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Domestic Emissions Trading (DET)

A variety of concerns about DET were expressed including concerns about:

- who would develop and operate a DET system (e.g. national/federal/provincial jurisdiction) and the potential for increased bureaucracy
- the level of government involvement in the economy as a result of a DET system
- the federal government's constitutional authority to operate a DET system
- the need for clarity about how DET would work
- potential domestic competitiveness issues and the possibility of creating a regional trading system
- the link to other emissions that are regional or eco-system specific and the possibility for regionally limited trading systems
- the potential for market abuse and speculation
- whether DET addresses pollution at its source
- the ability of SMEs to effectively participate in a DET system
- the cost effectiveness of the DET option (e.g. it has been asserted but not demonstrated that DET is the cheapest option).

Other views in support of a DET system stated that DET is essential to minimize costs (and impacts on SMEs) and to balance efficiencies, equity and competitiveness concerns (possibly through an output-based approach). The limited potential for SMEs to participate in DET was raised.

The use of revenue from the auction of permits to encourage and enable the transition to a carbon-free society by industry and citizens was suggested as well.

4.2 Targeted Measures

There was a range of views on the use of voluntary approaches ("carrots") vs. mandatory approaches ("sticks") and a general view that these approaches can be complementary. There was some skepticism that the all targeted measures approach (option 2) is more expensive than other options as suggested in the Discussion Paper.

Suggestions for broad targeted measures included the need to ensure targeted measures are well costed to provide more certainty and direction for future. Other views addressed the need to remove perverse subsidies in different sectors; the need for measurement and reporting tools to help SMEs prepare emissions inventories; education and improved access to information; and measures that improve government procurement policies. There was also a call for provincial governments to introduce or enhance minimum energy standards for commercial buildings,

although a separate concern was raised that this regulatory approach is inappropriate for housing. Participants also made recommendations for targeted measures in several specific sectors including transportation, agriculture, energy, communities and SMEs.

Transportation Sector

Several participants articulated the need to change individual behaviour and noted that approaches to change behaviour work best when there are viable alternatives (e.g. use both "carrots" and "sticks").

The "Carrots"

- Encourage telecommuting
- Support for tax exemptions for employer-provided transit
- Improve transit systems in both urban and rural communities and enhance linkages between the two; federal funding would be required to improve these systems sufficiently.
- Encourage cycling and walking (e.g. by building better infrastructure).

The "Sticks"

- Increase parking costs, create an urban fuel tax and implement distance-based vehicle insurance
- Include a tax on vehicles as well as on property

Other suggestions included providing sustainable transportation education (e.g. teach drivers to deal with cyclists) and measures targeted at efficiency freight transportation.
Over time, some participants also hope to see a reformation of land use decisions leading to change in city form supporting non-reliance on fossil fuels.

Energy

Some participants noted the great potential for energy conservation in individual households and recommended that disincentives such as the tax treatment of fuels and renewable energy products (e.g. solar panels) should be addressed. Other suggestions for energy-related targeted measures included:

- Use an inverted hydro cost structure to provide incentive for conservation and efficiency
- End use fuel switching
- Encourage energy efficiency (e.g. "powersmart" type programs)
- Improve energy standards for commercial buildings
- Expand transmission infrastructure for inter-provincial energy. Opportunities for hydro expansion for exports and cogeneration were also noted. There was an opposing view that hydro has environmental and social issues associated with it and that care should be taken in marketing it internationally.

Agriculture

The potential for organic agriculture was noted with others raising concerns about cost and scale of farm operation. Participants also suggested targeted measures aimed at promoting research on cattle to reduce emissions and deal with manure, improving rural transportation systems and providing better weather forecasting (long and short term) to reduce fuel costs.

4.3 Purchase of International Emission Permits

Many participants expressed a strong preference for domestic action rather than purchases of international permits. They were concerned about the impacts of price uncertainties on business decisions and about capital. Others stated that the use of international emissions permits allows industry and consumers to avoid making the changes that are necessary to achieve long term emissions reductions. Opposing views were articulated with respect to who should pay if international purchases are used; some felt that industry should pay while others stated that the consumer should pay. There was some interest expressed in the use of CDM/JI projects overseas and the potential to export clean technology to enhance Canadian competitiveness. However, there was a concern that the CDM/JI mechanisms are too "rich" for broad SME participation and that few SMEs have expressed interest in participating in CDM/JI partly because few SMEs are aware of the CDM/JI mechanisms.

Some participants felt that government purchases of international permits do not fit with the "polluter-pays" policy objective.

5. MIX OF POLICY INSTRUMENTS

Although many participants expressed a preference for domestic action as well as some skepticism of a DET system, several noted the difficulty in recommending a preferred policy approach due to:

- The lack of costing of co-benefits making it difficult to clearly see potential trade-offs
- Some serious concerns about whether targeted measures are more expensive or det is less expensive than other options
- Lack of information about actual emissions and about how a DET system would work.

Some participants urged action and emphasized the need to plan beyond 2012. Industry has a broad planning horizon and is seeking predictability to develop long term policies. Other participants noted that the effects of climate change are already being seen in Manitoba (e.g. on transportation infrastructure) and pushed for sector-specific solutions.

A strong view was expressed that action is necessary in order to address climate change and to reduce some of the risks of uncertainty. Some also noted that action is necessary to gain experience that can then be used to better prioritize measures and to better address current and future issues and opportunities. A caution was given, however, to carefully consider the costs of different types of measures before action is taken. It was also suggested that adversely affected companies should be provided with public assistance to offset some of the costs of compliance.

One view was expressed that the risks and costs of using "immature" new technology have not been accounted for in the options. On the other hand, industry's ability to find the least cost solution and to create innovative technology to meet changing needs was highlighted. Creativity at the community level was also highlighted (e.g. the ability of stewards/innovators to create avenues for change).

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – WINNIPEG, JUNE 19, 2002

Canadian Manufacturers and Exporters
Canadian Nature Federation
Centra Gas
City of Winnipeg
City of Winnipeg, Transit Department
Civil Engineering - University of Manitoba
Climate Action Network
Climate Change Connection
Cycling 4 Sustainability
Hudson Bay Mining & Smelting
Keystone Agricultural Producers
Manitoba - North Dakota Zero Tillage Farmers Association
Manitoba Cattle Producers Association
Manitoba Climate Change Hub
Manitoba Eco-Network
Manitoba Federation of Labour
Manitoba Heavy Construction Association
Manitoba Home Builders Association
Manitoba Hydro
Mining Association of Manitoba
Paskanake Project Management
PC Caucus
Pimicikamak Cree Nation
Resource Conservation Manitoba
SEA Change
Simplot Canada Ltd.
Tolko Industries Ltd.
University of Winnipeg

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE TORONTO WORKSHOP
HELD ON JUNE 21, 2002 AT THE WYNDHAM BRISTOL HOTEL

1. INTRODUCTION

The Toronto workshop was attended by approximately 70 stakeholders from a range of industry and other sectors, business associations, environmental NGOs, and academic institutions. This report is accompanied by a separate list of the organizations represented at the meeting.

2. VIEWS ON THE ANALYSIS (AMG)

Participants acknowledged the work of the Analysis and Modelling Group (AMG), had questions of clarification on the details, and also raised concerns about assumptions used in the analysis, or noted areas that could have been considered in the modelling analysis. Participants also commented on a number of important implications of the analysis.

A substantial number of participants from industrial and other sectors indicated a desire for a more detailed discussion about the assumptions and results specific to their sectors. This included industrial chemicals, electrical products, electrical manufacturing, electricity generation, trucking, gas distribution, petroleum refining, automobile manufacturing, agriculture and plastics. There was a strong view from many industry representatives that the modelling appeared to underestimate the impact of increased costs on their sectors and on consumers. Some also wondered if the linkages and interdependencies between sectors were appropriately modelled (e.g., mining services & primary metals). Others questioned the appropriateness of elasticity assumptions used in forecasting the relatively small price increases and consequent results on reduced demand for energy by consumers, commenting that price increases in recent years had not led to reduced consumer demand. A few participants questioned the overall validity of the macro-economic results and made reference to alternative analysis (e.g. by the Canadian Manufacturers and Exporters), which indicated greater adverse economic impacts. There was also a view that the macro-economic results masked some important negative impacts for individual sectors, including job losses in communities where there are manufacturing and other facilities. In general, there was a view that the analysis to date provided insufficient information for decision-making. A question was raised about the impact on Canadian productivity of constraining energy use, as was done in the modelling work.
Other participants noted that the analysis did not include benefits associated with air quality improvements, health benefits and opportunities for growth in green technologies. It was suggested that the use of the Genuine Progress Indicator (GPI) in addition to GDP might help capture some of these benefits. It was also noted that the analysis did not account for the potential for innovation and failed to represent many new technology opportunities (e.g. district energy, renewable energy, sustainable transportation).

There were many comments relating to the application of the "fiscal rule" used in the modeling which recycles government revenues from emissions trading to the personal income tax system, including:

- The relatively benign results in terms of GDP were almost entirely a result of the fiscal rule and that this masked some real adverse impacts for productive capacity in Canada.

There was an indication that follow-up discussions on this topic would be needed.

- Scepticism that shifting the tax burden to energy consuming companies from individuals through reducing personal income tax will produce overall positive benefits to the Canadian economy.
- Whether or not revenues recycled to individuals would be spent by consumers stimulating the economy, and whether they would purchase imports as opposed to Canadian products and services, causing a flow of investments and jobs out of Canada and reducing the standard of living.
- Whether or not it was reasonable to assume that governments would actually return all of the revenues or would see such revenue recycling as feasible.

It was suggested that the analysis should examine other options for revenue recycling.

Several participants also suggested that different scenarios for the post 2012 period should be modelled. It was noted that the assumptions post 2012 were very important because different choices might be warranted depending on the nature of the targets at that point in time.

The following views were also raised:

- Questions about assumptions on international permit prices and whether with the U.S. being out of Kyoto carbon prices would indeed be lower than otherwise forecast.
- The need for a sensitivity analysis on energy prices.
- The need for a sensitivity analysis on exchange rates and interest rates.
- Questions about the assumptions involved in calculating the contribution of agriculture to sinks and offsets.
- Concern that the analysis failed to include the economic feedback of climate change, which in Canada's case had been estimated by one study to be $13.5 billion in net benefits.
- A suggestion that Canada consider taking the penalties provided for non-compliance in the first commitment period under the Kyoto Protocol and use the extra time to develop technologies for the second commitment period.
- A question about the ability of the models to capture linkages between sectors and the need to recognize carbon emissions which are embedded in the "supply chain" for auto and other manufacturing sectors, as well as the consequent potential loss of jobs and its impact on communities, from reduced production.
- The need to identify and separate out the impacts on such manufacturing sectors, as plastics, which are largely non-emitting sectors but may suffer negative impacts from its links with the chemicals sector.

3. VIEWS ON THE OVERALL APPROACH

Discussion of the overall approach followed presentations on the Federal Discussion Paper and the Alberta Plan.

Participants had sharply divided opinions on ratification of the Kyoto Protocol.

Some participants believe that Canada should ratify the Kyoto Protocol as soon as possible to fulfill its international commitments, preserve our international reputation, gain environmental

and economic co-benefits and get a start on necessary long term GHG emission reductions. Canada needs to accept its social justice responsibilities and commitments, with respect to developing countries, to households and communities as well as to the globe.

Others believe that Kyoto is badly flawed and that the costs are unacceptable. Many industry participants believe that another option will need to be developed that addresses climate change outside of the Kyoto context. It was felt that such an option should provide greater harmonization with the U.S. approach, may have some elements in common with the Alberta Plan, and focus on emissions intensity, energy efficiency and a longer time horizon.

There were different views expressed on the policy instruments:

- Some participants supported the use of Domestic Emissions Trading (DET) , including some who supported it as portrayed in Option 1, expressing the view that price signals were preferable to the use of targeted measures, which had not been effective in the past.
- Others supported targeted measures, particularly those that focussed on improving energy efficiency for the long term.
- Many industry participants were opposed to the proposed application of a "best in class" or Best Available Technology (BAT) approach and scale-back factors, as included under DET in option 4. In their view, this would be a new tax, which would have particularly serious implications for capital-intensive industries.
- Some participants were generally opposed to the use of Cleaner Energy Export credits, based on the view that Canada has already achieved sufficient concessions in international negotiations. Others supported the idea and noted that the transparency of markets offered the opportunity to calculate displaced emissions in real time.

Many industry participants believe that the Kyoto options will reduce investment in Canada and that capital will move to the U.S. or to other countries that are not subject to targets. In their view, global emissions will not be reduced but Canada will suffer economically.

It was noted that it might be useful to consider the options in the context of a comparative risk assessment, involving the public, using the policy objectives to test different features of the proposed options. It was also suggested that there was a need to define the concept of acceptable/unacceptable burden.

It was also suggested that Canada's plan should incorporate both mitigation and adaptation.

4. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

4.1 Targeted Measures (TMs)

There was general support for the use of TMs, provided that governments incorporate the lessons from previous programs.

Participants supported approaches that are developed in cooperation with industry, and through cooperation between federal & provincial governments. There was particular interest in measures that included the following characteristics:

- Provide co-benefits and linkages to other policy objectives and programs
- Support energy efficiency
- Involve public education & engage Canadians in action
- Eliminate policy and regulatory barriers to investment in renewable energy and energy efficiency
- Use tax credits and other incentives
- Maintain a level playing field between energy choices
- Use covenants as opposed to regulatory approaches.

Participants suggested the following specific TMs:

- Programs to support energy audits, metering
- Programs to support voluntary approaches for new housing
- Incentives for building (and church) retrofits
- Continuation and enhancement of CIPEC, OEE, and VCR programs
- Regulatory incentives for utility DSM (e.g. Ontario Energy Board)
- Programs for enhanced landfill gas recovery
- Investments in sequestration technology
- Promising measures from the Transportation table (e.g. payload exemption for anti-idling tech, tax exempt status for transit passes)
- Investments in public transit
- Incentives for agriculture practices to support reduced emissions and sinks
- Phase-out of coal-based power plants and conversion to natural gas.

Some participants raised concerns about the cost-effectiveness and environmental benefits associated with current and future measures to support the use of ethanol. It was suggested that support for this measure might harm the credibility of TMs in general. However, it was stated that parts of the agriculture sector support the use of ethanol and are prepared to produce crop materials for ethanol production.

4.2 Domestic Emissions Trading (DET)

It was noted that DET is the least understood of the policy instruments. In particular there is a need for a better understanding of the details of its proposed design and operation and a detailed definition of the commodity that will be traded.

Some industry participants expressed opposition to the use of a cap and trade system based on emissions and suggested that the system be based on emissions intensity instead.

There were several comments concerning option 4:

- There was a concern that the benchmarking aspect of this option would lead to a massive bureaucratic intervention, in part to define the different industrial operations and that this would mean heavy lobbying to influence the structure of the system.
- There was also a view that the scale-back factor was inappropriate because it means imposing additional costs even for plants with best available technology.

- A concern that the result of option 4 would be that everyone would become a buyer of permits and that the effect would be to transfer an obligation to purchase international permits to Large Final Emitters.

Several participants expressed support for the use of offsets and suggested that the concept needed to be broadened from a focus on agricultural and forest sinks to include a range of potential emission reduction credits. There was also a suggestion that there be some credit for the emission reductions associated with the use of certain products (e.g. cement in highways, steel recycling).

The following views were also raised:

- The system must incorporate credit for early action.
- The system must be linked to the global trading system in order to provide access to the global market for both buyers and sellers.

It was suggested that the proposals for Domestic Emissions Trading should be examined to establish if they could provoke a claim under chapter 11 of NAFTA.

4.3 Purchase of International Emission Permits

There was a broad view that action in Canada was preferable to the purchase of international permits in order to preserve environmental co-benefits (e.g. air quality) and industrial opportunities in Canada including investment in new technologies. In particular, it was noted that the agricultural sector was prepared to contribute substantial amounts of offset credits but that there needed to be a domestic market for these offsets.

Concern was expressed to the purchase of so-called "hot air" from Russia and other countries whose emissions had dropped below 1990 levels. There was also a view that the proposal to "green" international permit purchases would restrict the supply and therefore drive up the price of those permits.

Overall, the view was that these purchases should be kept to a minimum to avoid transferring wealth outside the country.

5. MIX OF INSTRUMENTS

Some industry participants were unwilling to comment on the proposed mix of instruments because of the implication that this would lend support to the idea of ratification. In general, comments made were less about the mix than about the target to be reached.

There was a view that the appropriate mix should focus mainly on TMs, targets for sectors, and energy efficiency.

One participant noted the lack of leadership from industry and government, and suggested that the federal government needed to take strong action to build capacity for continuous improvement beyond 2012.

Another participant noted the overriding importance of public education.

6. RISKS OF RATIFICATION AND NON-RATIFICATION

A substantial number of industry participants highlighted the risk that the competitiveness of Canadian industry would be seriously affected should Canada decide to ratify Kyoto. In particular, it was noted that many industries are not in a position to pass on costs and therefore their continued survival would be at stake, with consequent serious job losses and effects on communities. Particular risks were raised about Canadian competitiveness in the North American context. There was also a view that there were risks associated with accepting the results of the analysis and modelling since there are so many assumptions included in those models, including, risks associated with a higher carbon price than forecast.

Other participants noted significant risks of non-ratification, including the risk that global community will fail to move towards the goals of the UN Framework Convention on Climate Change (UNFCCC) and that the global consensus on an approach to reducing emissions will be lost. The larger risk is that this may lead to a tripling or quadrupling of carbon dioxide levels with consequent major irreversible impacts to the climate system. There is also a risk of growing incompatibility between global ecological systems and economic systems.

Other views were also raised including that:

- If Canada does not succeed in gaining credit for Cleaner Energy Exports, it will be tempted to not ratify and the benefits will be lost.
- If Canada does not adopt an approach that is compatible with the U.S. approach, it will lose access to the opportunities in technology development and innovation that the U.S. will lead.
- Canada has invested too much effort in finding a Kyoto solution and will now have to start over in designing an alternative.

Participants identified the need for longer-term planning to address climate change, and for the need to put in place a transition strategy to assist seriously affected communities and industries.

7. ADDITIONAL COMMENTS

Finally, there was a view that the next round of consultations would be critical. Given that more people are now engaged as stakeholders, governments will need to seriously consider the most appropriate design to ensure those consultations are meaningful and adequately involve the public, communities and the full range of economic sectors.

NATIONAL STAKEHOLDER WORKSHOPS 2002
PARTICIPATING ORGANIZATIONS – TORONTO JUNE 21, 2002

AG Care
Air Transport Association of Canada
Association of International Automobile Manufacturers of Canada
BIOCAP Canada Foundation
Canadian Association of Oilwell Drilling Contractors
Canadian Council for International Business
Canadian Energy Pipeline Association
Canadian Gas Association
Canadian Home Builders Association
Canadian Lime Institute
Canadian Manufacturers and Exporters
Canadian Natural Gas Vehicle Alliance
Canadian Nuclear Association
Canadian Partnership for Alternative Transportation Fuels
Canadian Petroleum Products Institute
Canadian Plastic Industry Association
Canadian Plastics Industry Association/L'association canadienne de l'industrie des plastiques
Canadian Renewable Fuels Association
Canadian Trucking Alliance/Ontario Trucking Association
Canadian Urban Transit Association
Canadian Vehicle Manufacturers Association
Christian Farmers Federation of Ontario
Ciment St Laurent
City of Toronto, Works and Emergency Services
Clean Air Canada Inc.
Conservation Council for Ontario
Daimler Chrysler Canada Inc.
Dofasco
Dow Chemical Canada
Enbridge Consumers Gas
Enwave District Energy
Falconbridge Ltd.
Ford Motor Company of Canada Ltd.
General Motors of Canada Limited
ICF Consulting
Imperial Oil
Inco Ltd.
Independent Power Producers Society of Ontario
Innovative Farmers Association of Ontario
KAIROS
MacLeod Dixon LLP
MBC Energy and Environment
Nestle Canada
New Brunswick Lung Association
Nova Chemicals

Ontario Clean Air Alliance
Ontario Environment Industry Association
Ontario Farm Environmental Coalition
Ontario Federation of Agriculture
Ontario Forest Industries Association
Ontario Home Builders' Association
Ontario Mining Association
Ontario Pork
Ontario Power Generation
Railway Association of Canada
Region of Peel
Robert J. Redhead Limited
Rubber Association of Canada
Stelco
Toronto Environmental Alliance
Trent University
University of Guelph - Department of Geography
University of Toronto
York University

NATIONAL STAKEHOLDER WORKSHOPS ON CLIMATE CHANGE
REPORT ON THE IQALUIT WORKSHOP
HELD ON JUNE 24, 2002 AT THE FROBISHER INN

1. INTRODUCTION

The Iqaluit workshop was attended by 5 stakeholders. This report is accompanied by a separate list of the organizations represented at the meeting, found on the last page of this report.[3]

2. VIEWS ON THE ANALYSIS (AMG)

Participants discussed the AMG work largely from the territorial perspective.

Concerns were expressed about inputs to the business as usual (BAU) case for Nunavut. The first question related to mining. Based on a question about why the sectoral GHG reductions in Nunavut for the various scenarios shows no activity in the industry sector, it was clarified that information available for the analysis indicated that existing mines would be closing. Some participants expressed surprise at this assumption, noting that while two large mines are shutting down, others may remain operational; and there is strong potential for new mining developments. One participant indicated an expectation that as many as three new mines will open up within the next five years; and the *Canadian Environmental Assessment Act* (CEAA) process has already begun on at least one of these.

There was also extensive discussion among participants on whether the modelling has taken adequate account of other conditions that are unique to Nunavut. Participants noted that the territory must import all its fuel and that electricity generation is completely dependent on diesel. They also pointed out that the harsh climate necessitates high fuel consumption for basic needs (e.g., heat); and that the region's remoteness means considerable fuel consumption for travel, especially by air. The particular demographics of Nunavut were also mentioned. With most of the population under 15, high growth rate is projected, and demand for fuel-consuming goods and services will therefore rise. Given these factors, one participant questioned the potential for absolute emissions reduction in Nunavut.

There was an implied need to re-conceptualize aspects of the analysis to account for the economic contribution of non-monetary land-based activities. In particular, it was noted that in the AMG main drivers paper the contribution of Inuit food production from hunting, fishing, and trapping is not included.

There was concern that if regional realities are not adequately accounted for, the modelling outputs might not reflect the true potential impacts for Nunavut and its residents. *Action: Elizabeth Sherlock from the Department of Sustainable Development, Government of Nunavut will serve as a channel for information between participants and the AMG (via Neil McIlveen) on the accuracies of projected mining activities in Nunavut, as well as information on other dimensions that could improve regional modeling. It was noted that the timeline for this input is*

[3] It should be noted that several of the territorial government representatives who were present also actively participated in the discussion throughout the day. Given their integral role in some areas of discussion, their comments are reflected in this report, where appropriate.

essentially the next two weeks, since the directions for additional modeling work may well be needed by mid-July.

There were some questions about the fiscal rule that was applied for purposes of the analysis. It was also noted that the money proposed to be "recycled" via reduced personal income taxes might not truly end up in the pockets of individuals, as they will need to pay higher energy bills. A question was also raised as to why other policy approaches such as the use of corporate income taxes to cover additional program costs, were not considered.

The following views were also raised:

- The costs of adaptation to the significant effects of climate change currently occurring in the north are not included in the analysis.
- Canadians in general, and Nunavut residents, do not have a real sense of what ratification of Kyoto could mean for their consumption patterns and lifestyle.
- Changes in competitiveness due to higher fuel costs might mean some leakage of value-added processing from Canada.
- There are likely to be differences of opinion on jurisdictional ownership of benefits relating to forestry and agriculture carbon sinks.
- The potential for carbon sinks in Nunavut from forests in the Hudson's Bay area, as well as other possible sinks (e.g., sea kelp) should be explored.
- Uncertainties regarding the cost of carbon are important, as well as the implications of the U.S decision not to ratify.

3. VIEWS ON THE OVERALL APPROACH

There was some discussion on the overall Kyoto process, and whether federal representatives had a deadline for the decision on ratification. It was noted that the Nunavut government stands by its support for the Kyoto Protocol and the development of a national plan.

There was some discussion on the differences between the Alberta Plan and the Federal Discussion Paper. The Alberta Government representative indicated that Alberta has consistently advocated a jurisdictional "bottom up" approach to a national plan. Participants noted that the main differences appear to be that the Alberta Plan has a longer time frame, and it focuses on energy intensity targets to spur technological innovation.

According to one participant, the following are amongst the key points or positions for Inuit:

- There is a need for vigorous action on climate change along with strict timelines to achieve targets (unlike those stated in the Alberta Plan).
- Climate change is a global issue, and it is therefore necessary to maintain action in a global context.
- Given limited economic opportunities, and increased Inuit interest in opportunities related to oil and gas, and mining, actions taken should not create disincentive to these activities in the north.

Another participant inquired about the nature of the next round of consultations, whether they would be broad or more focussed, compared to the current round. It was suggested that more

targeted consultations, in particular, one based specifically on a northern/arctic plan or perspective would be useful. There was general support for the consideration of a "North of 60 policy" as part of the overall National Plan, given the sensitivities of northern communities and environments to both the impacts of climate change, and the impacts of mitigating climate change.

One stakeholder pointed out that there is an emerging attempt to implement a "pan-northern" approach to addressing climate change. It currently takes the form of a northern coordinating network managed by NRCan and INAC. Numerous federal departments and aboriginal organizations have participated, and the territorial governments have indicated some interest. It was suggested that a concerted effort is warranted to make this type of initiative work.

The following views were also raised:

- There is general concern that potential new mining developments be able to proceed in light of any Kyoto Plan
- One participant asked about the Kyoto enforcement mechanisms if Canada does not achieve the Kyoto targets.

4. IMPACTS AND ADAPTATION

Participants shared a very strong concern about the inevitable realities of climate change in the North. It was noted that although governments agreed that no region should be asked to suffer an unreasonable burden, the north is bearing, and will continue to bear, an unreasonable burden from impacts. One participant indicated that climate change has significant implications for the cultural survival of Inuit.

A wide range of specific impact examples were noted (e.g., thinning ice and its implications for the inshore fishery; salt-water intrusion on fresh water supplies; vulnerability of coastal communities to shoreline erosion). The likelihood of increases in catastrophic events and their potentially tremendous cost implications were also noted.

Participants agreed that significant work is needed to better understand impacts and adaptation in the North. It was pointed out that clear determination of research priorities is vital input to the national process; and community-level climate change impacts must be specifically addressed in doing this. The need for a gap-analysis to help determine research priorities was noted. More generally, the need for information to enable long-range planning was also noted. One participant recommended the use of existing documentation on Inuit land use and occupancy as a base for analyzing the implications of climate change.

Some existing research initiatives were described. Work already underway by C-CAIRN North was described, including their database of climate change research projects completed or underway. One participant also noted that the Arctic Council's *Arctic Climate Impact Assessment* has been a major research driver for northern impacts; and that the study, which will be completed in 2004, will help inform international advocacy on climate change. Inuit leaders have been highly involved in this program.

One participant expressed strong dismay at the apparent disconnect between the primacy of this issue, and the reality of research stations closures, and dwindling funds for research in general. Questions were also raised about the status of the Northern Chairs project.

There was apparent strong support for more federal-Inuit partnership on research. The need to ensure channels for impact information to come from affected communities was also emphasized.

The following views were also raised:

- Climate change bears potentially significant implications for Canadian sovereignty (e.g., related to increased navigability of the Northwest Passage), and the question of how to assert sovereignty should therefore be front and centre.
- Inuit land claims agreements bolster sovereignty, but changing conditions may affect the viability of some aspects of these claims. Climate change impacts on the rights and approaches articulated in claims need to be considered. (For example, need for new lands as ecosystem changes push land-use further north.)
- The Discussion Paper takes an important step in specifically highlighting the realities of particular impacts on aboriginal communities; but use of the term "lifestyles" is not appropriate in the northern context, because "lifestyle" implies a sort-of fashion-based, change-with-the-times phenomenon, whereas what the Inuit have is a way of life, strongly anchored to the land.
- A major focus on improved communications with southern Canada about the heavy toll that climate change is taking on the North and on Inuit is needed. The issue is already climbing the international agenda.

5. VIEWS ON THE DESIGN OF POLICY INSTRUMENTS

5.1 Domestic Emissions Trading

Participants preferred to discuss TM options, which they viewed as more pertinent to Nunavut.

5.2 Targeted Measures

Overall, there was a sense that targeted measures (TMs) could help to alleviate some of the burdens that participants had expressed concerns about, and could serve to enhance benefits. The hope was expressed that TMs could be used to help level the playing field among provinces and territories with respect to attracting investment.

Buildings

There was some discussion of the value and potential of developing North-specific building codes. One participant noted that retrofitting activities have been ongoing, although fossil fuel switching is not yet an option since natural gas resources have not been tapped, and alternative energy sources for buildings are still in early research stages. There was some discussion on the merits of using a regional energy centre or facilitation mechanism (examples cited included the Yukon Energy Centre and Arctic Energy Alliance) to coordinate territorial and federal activities and resources on energy efficiency initiatives in the north. It was noted that power corporations

have expressed interest in such a program in Nunavut. One stakeholder noted that some work has been done to exchange electric water heaters for oil-fired, and old appliances for more energy efficient ones, and more efficient furnaces and HVAC systems have been promoted, but there is room for more work in this area, including grey water recycling in homes.

Electricity

Participants discussed the concept of having more efficient power generation sources. One participant noted that power corporations have been increasing energy efficient technologies in their equipment, and suggested that this is a good focus for TMs in Nunavut. The potential for efficient use of waste heat from diesel generators was also suggested as a possible target. There is a pilot project in another Nunavut community involving use of the power corporation's waste heat to heat a warehouse.

Other participants discussed the potential for alternative energy production systems in Nunavut. Stakeholders noted that a solar wall has been established in Rankin Inlet as a pilot project, and also in the Iqaluit Arctic College, but that notwithstanding very good payback, the challenge is in financing the up front capital costs of using that technology. Participants also noted that wind energy projects in Nunavut are producing 0.5% of the electricity consumed in the territory. It was suggested that wind power holds great potential in Nunavut, and should be the subject of TMs. However, it was pointed out that more research and training is required to ensure optimum equipment operations for northern locations. It was also suggested that partnerships to share capital costs of larger-scale alternative energy pilot projects could be established with senior levels of government.

Industry

Participants discussed the importance of maintaining viability of the mining sector in the territory. The question was raised as to whether mining would be "caught" in a DET system, and if not, how could energy efficiency/emissions reductions actions be promoted through targeted measures. On the other hand, if mining operations would be covered, the question is one of how to mitigate impacts that might affect the economic viability of mining in Nunavut.

It was noted that companies will seek energy efficiency as a means of reducing energy costs. One participant also noted that in the North, mine developments usually involve the establishment of new communities, so there is potential for measures to ensure energy efficiency in these communities, and to implement options such as district heating in adjacent communities.

One participant pointed out that there are discussions underway on how CEAA can drive GHG reductions in the mining sector, and that there could be other applicable drivers.

Municipal

Territorial representatives noted that there is interest in community energy systems in Nunavut, and that they are looking at a pilot project for combined heat and power in one Nunavut community. Community energy planning is an important requirement.

One participant noted that potential resources from waste are untapped. In particular, he noted that landfills are an archived energy resource. However, the potential for waste incineration is constrained by the cost of an incinerator.

Transportation

Stakeholders discussed the TMs in the Discussion Paper, noting that most are not appropriate for northern fly-in communities. For their territory, participants noted that two categories of TMs are not reflected in Annex 2 of the Discussion Paper: air transportation and marine. It was noted that given it's short length, Iqaluit's runway cannot accommodate newer, more energy efficient aircraft. A participant also noted that TMs that improve incentives for marine transport are important for northern coastal communities. With regard to vehicles, participants generally felt that the incentives listed for vehicular incentives would not address the transportation issues that Nunavut faces, but that incentives for energy efficient off road vehicles would be of interest.

The following views were also raised:

- One participant noted the importance of education for any TM. He pointed out that electricity and fuel is subsidized for residents, and this is a disincentive to conserve. There was a suggestion to explore options to influence more energy efficient individual behaviour such as reducing or removing the energy subsidy, or using public education to achieve goals.

5.3 Purchase of International Emission Permits

The focus on discussion of impacts and targeted measures precluded discussion of this topic.

6. PREFERRED OPTIONS AND MIX OF INSTRUMENTS

As above.

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PARTICIPATING ORGANIZATIONS – IQALUIT, JUNE 24, 2002

Inuit Circumpolar Conference Canada
Nunavut Research Institute
Nunavut Housing Corporation
Nunavut Chamber of Mines